

**GOOGLE LLC'S OPPOSITION TO
PLAINTIFFS' REQUEST FOR AN
ORDER FOR GOOGLE TO SHOW
CAUSE FOR WHY IT SHOULD NOT
BE SANCTIONED FOR
DISCOVERY MISCONDUCT**

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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA, OAKLAND DIVISION

CHASOM BROWN, *et al.*, individually and on
behalf of all similarly situated,

Plaintiffs,

v.

GOOGLE LLC,

Defendant.

Case No. 4:20-cv-03664-YGR

**GOOGLE LLC'S OPPOSITION TO
PLAINTIFFS' REQUEST FOR AN ORDER
FOR GOOGLE TO SHOW CAUSE FOR
WHY IT SHOULD NOT BE SANCTIONED
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The Hon. Susan van Keulen

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1 I. INTRODUCTION

2 Even a cursory review of the facts to which Plaintiffs point in their breathless Motion for
 3 Sanctions reveals that—to borrow from Gertrude Stein—there is no *there* there. This motion should
 4 never have been filed. Plaintiffs’ central thesis is that “Google told the Court that ‘it is unclear how
 5 Plaintiffs could ascertain the members of the proposed class’ (including people who used Chrome
 6 Incognito) [while] Google has concealed ... that [it] implemented a tool to do just that for its own
 7 business purposes.” Mot. 1. These claims are entirely false.

8 Google concealed nothing. The premise of Plaintiffs’ request for sanctions is that Google
 9 hid from Plaintiffs certain log fields (called “bits”) used to approximate web traffic
 10 (“maybe_chrome_incognito_do_not_use_without_consulting_ads_identity_team” and the two
 11 related bits “is_chrome_non_incognito” and “is_chrome_incognito”), in violation of the Court’s
 12 November 12, 2021 Order and Google’s discovery obligations. That is demonstrably untrue. Google
 13 produced documents in June 2021 detailing the “is_chrome_non_incognito” bit, which Plaintiffs
 14 *relied on* in their July 2021 briefing regarding the X-Client-Data header. And notwithstanding that
 15 Google first logged the “maybe_chrome_incognito” bit only in June 2021, Google produced
 16 documents identifying the bit just three months later, in September 2021. Each of the three
 17 purportedly “stunning” “revelations” that Plaintiffs identify in the first page of their motion was
 18 disclosed in documents produced many months ago. The record demonstrates Plaintiffs (not
 19 Google) are responsible for their own failure to ask Google’s witnesses any questions about these
 20 materials earlier and that there has been no prejudice—much less extreme prejudice meriting
 21 sanctions.

22 Google’s approximations of aggregate Chrome Incognito traffic were not only disclosed—
 23 they were litigated at length before this Court and the Special Master when Plaintiffs sought
 24 production of event-level data without the X-Client-Data header. The hundreds of documents
 25 Google produced in response to Plaintiffs’ requests for production showed that Google used the
 26 absence of the X-Client-Data header as an approximation of *aggregate* Chrome Incognito traffic,
 27 but myriad factors made it an unreliable tool for tracing particular traffic to Incognito, much less for
 28 identifying any individual user browsing in Incognito. Although this method may have been

1 sufficient for a rough estimation of aggregate traffic, it was *never* meant to identify particular users,
 2 and certainly not with the level of accuracy needed to make a legal determination regarding whether
 3 a user is in or out of the proposed class. On these facts, the Special Master denied Plaintiffs' request
 4 for event-level data where the X-Client-Data header was absent.

5 Plaintiffs' other allegations of supposed discovery misconduct are equally baseless. Google
 6 did not "alter" any log schema. With the Special Master's express guidance, and Plaintiffs'
 7 knowledge, Google used an existing tool to automatically pull "the largest 100 fields" for some of
 8 the requested logs. Any other solution would have necessitated constructing a tool from scratch.
 9 Google did not intentionally exclude any field; it simply produced the output from its existing tool
 10 for the more than ■ requested log sources. As soon as the "maybe_chrome_incognito" field became
 11 a focus in the Special Master process, Google produced additional documentation, including source
 12 code descriptions. And Google did not "hide" Bert Leung and Mandy Liu. Last year alone, Google
 13 produced more than 9,500 documents that mention Mr. Leung, Ms. Liu, or both—including those
 14 describing Google's attempts to infer Chrome Incognito traffic.

15 Because there have been no discovery violations, Plaintiffs are not entitled to any relief. But
 16 the evidentiary sanctions Plaintiffs seek are particularly misguided. Plaintiffs ask the Court to deem
 17 as an established fact that Google can link event-level Incognito traffic to particular users and that
 18 the class is ascertainable. Pulling the lens back: Plaintiffs seek to certify two expansive classes of
 19 signed-out users stretching back to 2016: (1) millions of Chrome users in the United States who
 20 browsed using Incognito mode; and (2) millions of users of non-Chrome browsers who browsed in
 21 other, undefined private browsing modes. TAC ¶ 192. As to the first class, Plaintiffs' fundamental
 22 problem is that Chrome is specifically designed so that websites (and the services they use, including
 23 Google web services) cannot detect Incognito mode. Further, consistent with Google's Privacy
 24 Policy, Google does not associate data from signed-out Incognito sessions with a Google account.
 25 Therefore, data collected from members of the first class (signed-out Chrome Incognito users)
 26 during Incognito sessions are islands of orphaned data; they are not linked to a user's identity. The
 27 "maybe_chrome_incognito" bit does not change that answer with respect to users of Chrome's
 28 Incognito mode.

1 The second putative class, comprised of users of non-Chrome private browsing modes, is
 2 not affected by any of the purported discovery conduct in this Motion, but is similarly
 3 unascertainable. Indeed, Plaintiffs subpoenaed Mozilla, Apple, and Microsoft for documents to
 4 identify *their* private browsing users. Each responded with a version of the same message Google
 5 conveyed: there are no records that can be used to identify private browsing mode users.

6 Against this factual backdrop, Plaintiffs’ attempt to use the Court’s powers to bypass the
 7 question of whether it is possible to identify the class they seek to certify by concocting a baseless
 8 motion for sanctions is wholly inappropriate. The absence of the X-Client-Data header is not a
 9 reliable method to identify Incognito traffic. But even if it were, because Incognito browsing results
 10 in islands of data disconnected from each other and from a user’s identity, the absence of the X-
 11 Client-Data header in any particular traffic *still* would not help Plaintiffs at class certification.
 12 Deeming the class ascertainable to spite Google would only serve to prejudice absent class members
 13 (who could not be accurately identified) and ultimately leave the Court to deal with an
 14 unmanageable class of uncertain membership.

15 The law also clearly militates against awarding any of the sanctions Plaintiffs seek.

16 *First*, courts weighing evidentiary preclusion sanctions look at two key considerations: the
 17 extent of the prejudice and whether a lesser remedy is available. Here, both clearly favor Google.
 18 There has been no prejudice because the appropriate lesser remedy—additional discovery—is
 19 already underway. Mr. Leung and Ms. Liu have been deposed and their documents have been
 20 produced. Through the Special Master process, Google identified for Plaintiffs logs with the
 21 “maybe_chrome_incognito” boolean bit, Plaintiffs recently requested searches of all of the data
 22 sources listed in their motion, and Google will produce responsive results of those searches. The
 23 schedule of the case allows Plaintiffs ample time to continue incorporating these documents and the
 24 discovery in expert reports and their class certification briefing in June 2022.

25 *Second*, an instruction to the jury that “Google concealed and altered evidence” is
 26 unwarranted: Google did not conceal or alter any evidence, and this factually incorrect instruction
 27 is not designed to fill any evidentiary gap related to any finding the jury may make in this case.

28 *Third*, monetary sanctions are inappropriate where, as here, there has been no violation.

For these reasons, Plaintiffs' motion should be denied.¹

II. BACKGROUND

A. Google Produced Documents Identifying the “Maybe_Chrome_Incognito” Bit in the [REDACTED] Project Starting in September 2021

On the first page of their motion, Plaintiffs announce “stunning” “revelations” in documents Google produced in February 2022 about the use of the “maybe_chrome_incognito” bit in a project to detect cookieless traffic (the [REDACTED] Project”). Mot. 1. The same argumentative bluster is carried into the two Mao Declarations in support of Plaintiffs' motion.² Then, tucked away in a footnote on page 16, Plaintiffs begrudgingly acknowledge that Google produced documents disclosing the same project *last year*. Plaintiffs downplay its importance by claiming it amounted to “a tiny number of documents” and did not show “that Google actually implemented the [“maybe_chrome_incognito”] field in Google logs.” Mot. 16 n.2. Plaintiffs are wrong on both counts.

In the first two days of September 2021, Google produced two foundational documents detailing the [REDACTED] Project”: a technical design document that explains the technical and engineering steps required by the project, Trebicka Decl. Ex. 10 (GOOG-CABR-00544408), and the corresponding master design document with a general roadmap of high-level details about a project's status and purpose. Trebicka Decl. Ex. 12 (GOOG-CABR-00901891). These documents robustly detail how the project was engineered to achieve its stated goal [REDACTED] [REDACTED] including by (1) mentioning the “maybe_chrome_incognito” bit *seventeen*

¹ Plaintiffs' additional request that “the Court [] reinstate [their] October 14, 2021, Rule 37(b) Motion” (Dkt. 292) should be denied; the Court has stayed the briefing for that Motion.

² Paragraphs 3–12, 15–23, 25, and 27–31 of the Declaration of Mark C. Mao in Support of Plaintiffs' Request for an Order to Show Cause (Dkt. 429-3) and Paragraphs 4–8, 10–11, 14–16, 19, 22–24, and 26–30 of the Second Declaration of Mark C. Mao in Support of Plaintiffs' Order to Show Cause Motion (Dkt. 494-3) contain conclusions and argument in violation of Local Rule 7-5(b) and should be stricken. *See Hinson v. Metro. Life Ins. Co.*, 2012 WL 13054268, at *1 (N.D. Cal. Aug. 1, 2012) (striking “in substantial part” an attorney declaration that “contains improper argument in violation of Civ. L.R. 7-5(b),” including summaries of testimony and purported descriptions and analysis of documents); *First Mercury Ins. Co. v. Great Divide Ins. Co.*, 241 F. Supp. 3d 1028, 1045 (N.D. Cal. 2017) (sustaining objection to paragraphs in declaration that are “argumentative and contain[] legal conclusions concerning this Court's prior order”).

1 times as a field on which the project would rely; (2) explaining that the basis of the inference would
 2 be the absence of the X-Client-Data header, which “is the only signal Ads can rely on to heuristically
 3 detect Incognito mode in Chrome traffic slices”; and (3) explaining that the “context” in which the
 4 project arose was the then “scattered and partial effort across Ads” to “detect[] 3P cookie[]
 5 blocking,” and listing the rollout of the project during the [REDACTED]. *See, e.g.,*
 6 Trebicka Decl. Ex. 12 (GOOG-CABR-00901891 at -1891–1892).

7 These two anchoring documents should have left Plaintiffs—and their 25 experts who have
 8 permission to view Google’s AEO material—with no doubt about the existence and implementation
 9 of the project, its technical and factual underpinnings, the role of the “maybe_chrome_incognito”
 10 bit, and its reliance on inferences regarding the absence of the X-Client-Data header. If any doubt
 11 remained, it would have been extinguished by Google’s further productions from September 24,
 12 2021 to November 24, 2021 showing the project’s technical design was “APPROVED” and that the
 13 “maybe_chrome_incognito” bit was a field “we are logging ... into [REDACTED]. A few illustrative
 14 examples:

- 15 • Additional project technical design document dated May 4, 2021 showing it was
 16 “APPROVED” by four separate “Approvers” and produced September 24, 2021.
 Trebicka Decl. Ex. 13 (GOOG-CABR-03668216);
- 17 • Master design document dated July 16, 2020 produced on October 6, 2021. Trebicka
 18 Decl. Ex. 20 (GOOG-CABR-04470006); Trebicka Decl. Ex. 21 (GOOG-
 CABR-04796629) (same produced October 29, 2021);
- 19 • June 10, 2021 email from a Google code reviewer identifying the bit and providing
 20 “Approval” of project’s computer code produced November 24, 2021. Trebicka Decl.
 Ex. 23 (GOOG-CABR-05285407);
- 21 • June 10, 2021 emails from Mandy Liu (the code reviewer) identifying the bit and
 22 providing a modified changelist related to the project produced November 24, 2021.
 23 Trebicka Decl. Ex. 24 (GOOG-CABR-05285409); Trebicka Decl. Ex. 25 (GOOG-
 CABR-05285410) (similar);
- 24 • June 15, 2021 email from Mandy Liu identifying the bit and [REDACTED] produced September
 24, 2021. Trebicka Decl. Ex. 16 (GOOG-CABR-03668991);
- 25 • June 21, 2021 emails identifying the bit and [REDACTED] produced September 24, 2021.
 26 Trebicka Decl. Ex. 17 (GOOG-CABR-03669472); Trebicka Decl. Ex. 18 (GOOG-
 CABR-03669574).

1 See also Trebicka Decl. Exs. 23, 26–31. Notably, the three documents Plaintiffs highlight as
 2 “stunning” “revelations” contain *less* detail than the documents Google produced *six months earlier*
 3 in September 2021:

Plaintiffs’ “Stunning” “Revelations” in February 2022 (Mot. 1)	Examples of Information Google Produced in September 2021
<p>6 “Since June 2020, Mr. Leung and Mandy Liu have worked on a project to ‘[REDACTED]’ 7 [REDACTED]s (Safari ITP, Firefox ETP, <i>Chrome Incognito</i>, etc.) in ad serving, and <i>log this information for monitoring and analysis.</i>” Mot. 1 8 (citing Pl. Ex. 1) (emphasis in original).</p>	<p>Google produced the July and December 2020 design documents titled “[REDACTED] [REDACTED] [REDACTED] [REDACTED]” that explained the project over the course of three dozen pages, including Trebicka Decl. Ex. 10 (GOOG-CABR-00544408 at -409) and the master design document confirming “Proposals [to] introduce a shared piece of infrastructure to identify [REDACTED] [REDACTED] . . . [and] <i>Logging & monitoring to support analysis</i>”. Trebicka Decl. Ex. 12 (GOOG-CABR-00901891 at -894).</p>
<p>13 “As part of that effort, Mr. Leung suggested ‘<i>logging inferred Chrome Incognito detection</i>’ in June 2020 . . . and he and Ms. Liu decided to call this field a ‘<i>maybe_chrome_incognito</i>’ bit in October 2020 (after this case was filed).” Mot. 1 (citing Pl. Ex. 2) (emphasis in original).</p>	<p>Google produced June 2021 emails stating: “Added a data source to set values for the browser intelligence project on Display Ads side. . . . we are <i>logging</i> [REDACTED] fields into [REDACTED] . . . 6. <i>Maybe Chrome Incognito bit</i>” Trebicka Decl. Ex. 16 (GOOG-CABR-03668991); Trebicka Decl. Ex. 17 (GOOG-CABR-03669472); Trebicka Decl. Ex. 18 (GOOG-CABR-03669574).</p>
<p>18 “Google <i>actually began logging</i> the proposed ‘<i>maybe_chrome_incognito</i>’ field in multiple logs in or around [REDACTED] 19 [REDACTED] and has since actually built out a functional Dashboard tool to ‘detect[] and monitor[]’ such traffic, ‘quantify the impact’ of Incognito’s 3P-cookie-blocking to Google, and conduct ‘monitoring and analysis.’” Mot. 1 (citing Pl. Ex. 3) (emphasis in original).</p>	<p>Google produced [REDACTED] design documents that clearly explained the <i>logging of the proposed “maybe_chrome_incognito” field</i>, and stating “[t]he solution proposed needs to fulfill the following requirements. . . <i>Monitoring: Dashboard to show traffic slices</i>” for the cookieless traffic, including <i>inferred Chrome Incognito</i> Trebicka Decl. Ex 12 GOOG-CABR-00901891 and explaining that <i>“Monitoring: Dashboards will be set up to monitor the traffic volume of different browser categories for analysis purposes.”</i> Trebicka Decl. Ex 13 GOOG-CABR-03668216 at 224.</p>

B. The Special Master Declined Further Production of Data Without an X-Client-Data Header After Google Explained It Was Not Reliable to Identify Class Members

Plaintiffs’ attempt to certify an expansive class of Chrome users who browsed using Incognito mode while signed out of their Google account, TAC at ¶ 192, faces an insurmountable obstacle. Chrome is designed to make Incognito mode undetectable, Liao Decl. ¶ 4, and—consistent with that design and Google’s Privacy Policy—Google does not associate data from signed-out sessions with a Google account. Trebicka Decl. Exs. 49 (Berntson 30(b)(6) Tr. 372:18–373:16), 51 (GOOG-BRWN-00000152 (Google Privacy Policy)). Therefore, their class of Incognito users is unascertainable. The “maybe_chrome_incognito” bit does not resolve that problem.

1. After Extensive Briefing on the Technical Details, the Special Master Rejected Production of Event-Level Data Where the “X-Client-Data Header” Was Absent

Plaintiffs’ attempt to use the absence of the X-Client-Data header as a solution to their dispositive class identification problem is not new. In October 2021, the Special Master considered and rejected Plaintiffs’ request for event-level data in which the X-Client-Data header was missing so they could attempt to use it to identify Incognito sessions. Dkt. 299. That dispute centered on the [REDACTED].³ See, e.g., Pl. Ex. 14 (GOOG-CABR-04324934). Google tasked Google Ads engineers Chris Liao and Bert Leung with [REDACTED] *Id.* Mr. Liao and Mr. Leung used the absence of the “X-Client-Data header” as a method to estimate aggregate Incognito mode traffic. Liao Decl. ¶ 5; Leung Decl. ¶ 3.

On October 19, 2020, Plaintiffs asked for “Documents sufficient to identify, during the Class Period, Chrome web browser communications that did not contain any X-Client[-]Data [h]eader.” Trebicka Decl. Ex. 48 (Pls. 2nd Set of RFPs). In June 2021, Plaintiffs took a Rule 30(b)(6) deposition

³ Google began rolling out Chromeguard in May and June 2020. Pl. Ex. 14 (GOOG-CABR-04324934).

1 on this topic. Trebicka Decl. Ex. 49. Google also produced *hundreds* of documents related to this
2 method to infer aggregated Incognito web traffic. Ansorge Decl. ¶ 92. Google objected, however,
3 to providing the event-level data because the burden of providing the information Plaintiffs sought
4 far outweighed its meager benefit. Dkt. 217-4.

5 The dispute was referred to the Special Master on July 13, 2021. Dkt. 221. Google made two
6 principal arguments. *First*, the absence of the X-Client-Data header is not a reliable indicator of
7 Incognito traffic; there are millions of instances in which an X-Client-Data header is missing from
8 non-Incognito traffic. Dkt. 217-4 at 8–10. Plaintiffs, by contrast, argued to the Court and the Special
9 Master that Mr. Liao’s use of the absence of the X-Client-Data in his Chromeguard project showed
10 it is “an undisputed signal that a user is in Incognito mode.” *Id.* at 3 (citing Mr. Liao’s project
11 documents).

12 *Second*, Google argued that even if the absence of the header reliably indicated Incognito
13 traffic, it could not be used to identify specific users or putative class members. *Id.* at 7. It is
14 undisputed that Incognito sessions during which a user, like the entire putative class, does not log
15 into a Google account are never associated with the user’s Google account. Trebicka Decl. Ex. 49,
16 Berntson 30(b)(6) Tr. 372:18–373:16. Instead, the sessions are linked to cookie values that are
17 deleted from the user’s browser when the Incognito session is closed. *Id.* at 9. Therefore, even *if* this
18 bit accurately inferred Incognito traffic, that information cannot be translated into identifying class
19 members. *Id.*

20 The Special Master reviewed the briefs and their detailed technical explanations, and agreed
21 with Google. He denied Plaintiffs’ request for production of all data from which the X-Client-Data
22 header was absent. Dkt. 299-1 at 2. In the November 12, 2021 Order Plaintiffs now claim Google
23 violated, the Court adopted the Special Master’s findings regarding Dispute P16, noting that the
24 findings were “well taken” and “mirror[ed] the Court’s handling of [this] issue[] prior to engagement
25 of the Special Master.” Dkt. 331 at 3. The Court accurately explained that P16, among others, had
26 been “briefed and argued extensively before this Court, before the Special Master, and most recently
27 again before this Court at the hearing on November 4, 2021. *Id.* at 2.

28

2. The “**Maybe_Chrome_Incognito**” Bit Relies On The Same Imperfect Method the Special Master Already Rejected

The “**maybe_chrome_incognito**” bit at issue here is an extension of the Chromeguard analysis project, using the *same* logic and for the *same* business purpose of **estimating aggregate traffic**. Liao Decl. ¶ 10; Leung Decl. ¶¶ 8–9. In May 2020, Google Ads engineers Bert Leung and Mandy Liu, under the supervision of Mr. Liao, continued Google’s attempt to **identify percentages of traffic that blocked third party cookies by default**. Liao Decl. ¶ 10; Leung Decl. ¶ 8. To do so on a continuous basis for Chrome Incognito, Mr. Leung created a **new bit to identify changes in cookieless traffic flow over time**. This single bit cannot identify individual users, or store any meaningful identifying information. Leung Decl. ¶ 9.

Mr. Leung and Ms. Liu named the bit “**maybe_chrome_incognito**” to ensure they were not overstating its ability to identify traffic. *Id.* Indeed, the bit’s full name (*i.e.*, the one reflected in the project’s computer code) is “**maybe_chrome_incognito_DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TEAM,**” even more clearly signaling the bit’s limited purpose and efficacy. *Id.* Since the purpose of this exercise was to monitor *changes* over time, the percentage of traffic did not need to be precise; the *change* in such traffic (for example, increases or decreases observed in cookieless traffic) was important. Liao Decl. ¶ 9. Leung Decl. ¶ 8.

As Plaintiffs know, Google is not alone in its inability to identify users of its private browsing mode. Plaintiffs subpoenaed Mozilla, Apple, and Microsoft, asking for “ALL DOCUMENTS sufficient to IDENTIFY all individuals who have used InPrivate Browsing mode in [Firefox; Safari; Microsoft IE/Edge] from June 1, 2016 to the present.” Each entity declined to produce documents on the ground that there are no records that can be used to identify private browsing mode users. Trebicka Decl. Exs. 44–46 (responses from Mozilla, Apple, and Microsoft).

C. Plaintiffs Failed to Explore the “Maybe_Chrome_Incognito” Bit in the Intervening Months

1. Plaintiffs Deposed Chris Liao in December 2021 Yet Asked No Questions about “Maybe_Chrome_Incognito”

The alleged prejudice Plaintiffs now claim is of their own making. In the two days Plaintiffs in *Brown* and *Calhoun* deposed Mr. Liao, they asked no questions about the “maybe_chrome_incognito” bit or any of the documents specifically identifying it, including those Google had produced more than three months before the deposition. *See supra* § II.A.

Plaintiffs now improperly and baselessly claim Mr. Liao made a misrepresentation about the “maybe_chrome_incognito” bit—but counsel did *not* ask about that bit. Plaintiffs also assert that Chris Liao “testified that Google had abandoned any efforts to identify Incognito traffic within its logs.” Mot. 15. Plaintiffs cite nothing to support this misstatement because Mr. Liao never gave such testimony. *See* Liao Decl. ¶ 13. Plaintiffs also claim Mr. Liao misleadingly answered “no” to the question whether “amongst these privacy signals, is there one for [I]ncognito mode browsing on Chrome?” Mot. 15. Plaintiffs again distort the facts. *See id.* The referenced passage immediately followed a question about the “parse privacy req[uest] params” logic in a document related to “ID Enrichment.” Trebicka Decl. Ex. 40 (“Liao Tr.” at 130:11–19). That logic has nothing to do with the “maybe_chrome_incognito” bit; it is logic sent directly from the Chrome browser to parse privacy signals, such as those related to European privacy requirements or child protection requirements. Liao Tr. at 130:13–131:11. In that context, counsel then asked:

BY MR. MAO:

Q. [] As far as you’re aware, amongst *these privacy signals*, is there one for incognito mode browsing on Chrome?

A. No.

Q. Is there a reason that you’re aware as to why that would not be a privacy req parameter for [REDACTED]

MR. ANSORGE:

Q. Objection. Form.

THE WITNESS:

A. I am not aware of a URL parameter that would indicate incognito mode.

BY MR. MAO:

Q. What about a parameter specifically to signal to [REDACTED] to parse out that, oh, this is incognito mode traffic?

1 A. There is no explicit signal to identify incognito mode traffic.

2
3 Liao Tr. at 131:14–132:3 (emphasis added). Mr. Liao’s testimony is correct. There is no URL
4 parameter *or* explicit signal that identifies Chrome Incognito mode. Liao Decl. ¶ 13.

5 Mr. Liao’s additional testimony that there is no “*reliable signal to infer [I]ncognito mode at*
6 *this time we receive an ad query*” is also entirely accurate. Mot. 16. The absence of the X-Client-
7 Data header is an unreliable proxy for Chrome Incognito. *See supra* § II.B.1; Liao Decl. ¶¶ 5–7.
8 And the “*maybe_Chrome_incognito*” bit is *not* a signal, much less a reliable one. Liao Decl. ¶ 13.

9 **2. Plaintiffs Knew of Bert Leung Since April 2021—Yet Waited Months to**
10 **Ask for His Documents or Deposition**

11 Plaintiffs claim that “in 2021, Google hid[] Mr. Leung” from Plaintiffs and the Court. Mot.
12 8. This, again, is demonstrably false. Starting in April 2021, Google produced documents
13 highlighting Bert Leung as an “infrastructure engineer” in the context of addressing Safari’s
14 blocking of third-party cookies. *See e.g.*, Trebicka Decl. Ex. 1 (GOOG-BRWN-00033225.C).
15 Messrs. Liao and Leung and Ms. Liu were also identified in a document of potentially relevant
16 Google employees produced in August 2021. Trebicka Decl. Ex. 8 (GOOG-CABR-00064421).⁴
17 And from June 2021 through November 2021, Google produced numerous emails from Mr. Leung,
18 including documents related to inferring Chrome Incognito server-side traffic, *see, e.g.*, Trebicka
19 Decl. Exs. 4 (GOOG-BRWN-00182034), 5 (GOOG-BRWN-00204684), 9 (GOOG-CABR-
20 00484343), and other Chrome Incognito related projects and tasks, *see, e.g.*, Trebicka Decl. Exs. 3
21 (GOOG-BRWN-00181672), 7 (GOOG-BRWN-00536949), 11 (GOOG-CABR-00547295), 13
22 (GOOG-CABR-03668216). In fact, Plaintiffs *themselves* cited an email from Mr. Leung regarding
23 inferring Incognito traffic in November 2021 meet and confer correspondence, Trebicka Decl.
24 Ex. 36 (11/09/2021 Ltr. *citing* GOOG-CABR-00547295), and referenced, in even earlier meet and
25 confer correspondence, a document listing both Mr. Liao and Mr. Leung as infrastructure engineers,
26 *see* Trebicka Decl. Ex. 34 (07/16/2021 Ltr. *citing* GOOG-BRWN-00175744).

27 ⁴ Plaintiffs successfully argued for cross-production of *Calhoun* documents on the basis that it
28 would make litigation more efficient. Having advocated for these documents, it was their
 responsibility and duty to conduct a thorough review of the evidence presented to them.

1 Plaintiffs' complaint that Mr. Leung was not added as a custodian until February 2022 rings
 2 hollow. Mr. Leung's name appears in approximately 9,500 documents produced between April 2021
 3 and December 2021. Ansorge Decl. ¶ 90. By contrast, Google's February 2022 productions
 4 contained only 297 of Mr. Leung's custodial documents. In any event, that Mr. Leung was not added
 5 as a custodian until later in the case is Plaintiffs' own failing.⁵

6 Similarly, Plaintiffs baselessly accuse Google of derailing Mr. Leung's deposition date. Mot.
 7 6–7. Not so. Google first proposed that the deposition take place on February 25, 2022, but Plaintiffs
 8 failed to confirm that date within the Court-ordered 48 hours. *See* Trebicka Decl. Exs. 37 (1/11/2021
 9 email from S. Jenkins), 38 (2/13/2022 email from A. Frawley). A work emergency unrelated to this
 10 case made the February 25 date unworkable for Mr. Leung, so his deposition proceeded one week
 11 later. Trebicka Decl. Ex. 39 ("Leung Tr.") at 25:14–17.

12 **D. Plaintiffs' Supplemental Briefing Does Not Provide a Basis for Sanctions**

13 On March 21, 2022, Plaintiffs filed supplemental briefing alleging that Google improperly
 14 withheld information relating to two additional bits and an additional header. Dkt. 510-1 (identifying
 15 the "is_chrome_incognito" bit, the related "is_chrome_non_incognito_mode" bit, and the "X-Geo
 16 header"). That is demonstrably untrue:

- 17 • As early as November 16, **2020**, Google's production included documents identifying
 18 the X-Geo header and explaining that it "will never be sent in Incognito mode." *See, e.g.*,
 Trebicka Decl. Ex. 14 (GOOG-BRWN-00023886 at -3887).
- 19 • On June 18, 2021, Google produced a document identifying the
 20 "is_chrome_non_incognito_mode bit" as being "used by the [redacted] [T]eam" and
 21 explaining that the "bit is only set in tmp [redacted] logs." *See, e.g.*, Trebicka Decl. Ex. 15
 (GOOG-BRWN-00176433 at -6434).

22 Plaintiffs relied on documents disclosing this field to argue in their **July 2021** briefing that
 23 "Google maintains systems and processes to identify Incognito browsing, including ready-made
 24 tools that run queries based on the X-Client-Data header field." Dkt. 217-4 at 4 (*citing* GOOG-

25 ⁵ Google initially identified ten custodians. Trebicka Decl. Ex. 32 (1/25/21 Ltr. to Plfs). Plaintiffs
 26 demanded more. The Court expanded the number to 42. Plaintiffs selected the 32 remaining
 27 custodians between April and August 2021. They did not pick Mr. Leung, although they had notice
 28 of him since April 2021. Plaintiffs sought to add Mr. Leung as their forty-third custodian in
 December 2021. Google first objected, but agreed to add him in February given the low number of
 additional documents for review. Ansorge Decl. ¶ 47.

BRWN-00176433). When Plaintiffs are seeking additional discovery, they know the tools are “use[d]” and “ready-made;” but when they are seeking sanctions, the same tools are only just “discover[ed]” after Google “concealed” their implementation. Dkt. 217-4 at 4; Dkt. 510-1 at 1.

Like the “maybe_chrome_incognito” bit, these two additional fields consist of only a “true” or “false” boolean value determined by the presence or absence of the X-Client-Data header,⁶ Trebicka Decl. Ex. 42 (“Sadowski Tr.” 91:2–8). And just like “maybe_chrome_incognito,” neither of these other bits is “a reliable or accurate way to determine [I]ncognito usage,” (Sadowski Tr. 76:12–16) and user identification was never their purpose. Both bits were created by a team improving geolocation information connected with Google’s Search engine (the “██████ Team”) and stored in logs managed by that team (“██████ logs”). *Id.* 70:5–10, 71:8–17; Trebicka Decl. Ex. 15 (GOOG-BRWN-00176433 at -6434). The two bits were introduced in 2017. *Id.* 70:11–72:2. The ██████ Team never used these bits to identify specific Incognito users and has not relied on these bits for any purpose since 2018. *Id.* 70:24–71:23.

Plaintiffs argue that the “is_chrome_non_incognito_mode” bit is also stored in two ads logs (██████ and ██████) because schema produced by Google on March 11, 2022 referenced the bit. *See* Supp. Mot. 3. That is wrong, too. Google’s Rule 30(b)(6) deponent confirmed many times that the bits exist “in and *only* in ██████ logs,” Sadowski Depo. 70:17–18, and that “if you look in the protocol buffer that has this field, there is an annotation saying that it is specifically *only* used in ██████ logs.” *id.* 92:9–11 (emphasis added).⁷

⁶ Plaintiffs argue that “Google has used the absence of X-Geo header as another signal for detecting Chrome Incognito usage and stores the signals in Google logs as ‘true’ or ‘false’ bits in the ‘is_chrome_incognito’ and ‘is_chrome_non_incognito’ fields.” Supp. Mot. 1. Wrong. Google’s Rule 30(b)(6) deponent, Dr. Sadowski, explained that the value of the “is_chrome_non_incognito” bit is determined by whether an “X-Client-Data header [is] in the request that is sent” and “that is all that it looks for.” Sadowski Tr. 76:5–16, 77:20–78:2 (stating the “is_chrome_incognito” bit “is not derived through some other mechanism than presence or absence of X-Client-Data header, and suffers from the same limitations.”). The “is_chrome_incognito” bit is derived directly from the “is_chrome_non_incognito_mode” bit. *Id.* 77:20–25.

⁷ The reason the bits appear to be included in the two ads log is simple. The “is_chrome_non_incognito” bit is included in the Google Web Services Protocol Buffer, or “GWS proto,” a data format used to structure serialized data (also referred to as “proto” in shorthand). As Google has explained, not every log that uses the proto will include every single field found in the proto. *See* Trebicka Decl. Ex. 47 (03/23/2022 Special Master Hr’g Tr. 41:4–6). At Plaintiffs’

1 The “is_chrome_non_incognito_mode” bit and the [REDACTED] logs that contained it were *not*
 2 the focus of the lengthy and deliberative Special Master process because they were entirely
 3 irrelevant to the case Plaintiffs were prosecuting. *See* Golueke Decl. ¶ 11. Until last month,
 4 Plaintiffs’ proposed class definition was limited to individuals “who accessed a non-Google website
 5 containing Google Analytics or Ad Manager.” *See* Dkt. 395-3 at 55. Google’s search engine was
 6 not in scope. Plaintiffs knew of the “is_chrome_non_incognito_mode” bit (and that it was stored in
 7 [REDACTED] logs) by June 18, 2021, Trebicka Decl. Ex. 15 (GOOG-BRWN-00176433 at -6434), yet
 8 waited until December 2021 to serve a deposition notice on this topic, Ansorge Decl. Ex. 38 (Pls.
 9 12/3/2021 Rule 30(B)(6) Dep. Not.), for which Google designated Dr. Caitlin Sadowski.

10 **E. Google Complied With the Court’s November 12, 2021 Order**

11 On November 12, 2021, the Court ordered Google to (1) “provide a declaration . . . [that]
 12 [t]o the best of its knowledge, Google has provided a complete list of data sources that contain
 13 information relevant to Plaintiffs’ claims,” and (2) “provide to the Special Master full schemas, a
 14 list of ALL fields with their descriptions, a list of tools used to search the respective data sources,
 15 and instruction sets and manuals for all tools” Dkt. 331 (the “November 12 Order”) at 7. The
 16 Special Master was “to be an intermediary throughout each step” of Google’s production of data, to
 17 “evaluate the results for content and compliance with this Order,” and “authorized [him] to take all
 18 appropriate measures to perform his duties fairly and efficiently and to enforce this Order as he
 19 deems appropriate including modifying this Order, issuing further orders.” *Id.* at 5–6.

20 **1. Andre Golueke Attests to the Relevant Log Sources**

21 On November 18, 2021, Google provided a declaration from Discovery Manager Andre
 22 Golueke stating that, “[t]o the best of [Mr. Golueke’s] knowledge and informed understanding,
 23 Google has provided a complete list of sources that contain information about Plaintiffs relevant to
 24 Plaintiffs’ claims.” Dkt. 338. To make that attestation, Mr. Golueke obtained information from

25 _____
 26 insistence, Google used its Dremel tool to provide Plaintiffs information about fields. Ansorge
 27 Decl. ¶ 57. Using this tool resulted in the inclusion of an overinclusive set of fields from the
 28 underlying GWS proto. The “is_chrome_non_incognito” bit is *not* written in the [REDACTED]
 [REDACTED], and the value of the bit will always default to “false when querying
 those logs with the Dremel tool.” Trebicka Decl. Ex. 47 at 48:17–23.

multiple Google engineers and other Google personnel working on identifying and searching numerous complex data sources for this litigation. Dkt. 338 at 1. Mr. Golueke’s declaration attached a list of those data sources, spanning nearly four pages, Dkt. 337-3, and a list of Plaintiffs’ data that had been produced or would be produced, spanning 20 pages, Dkt. 337-4. Plaintiffs did not challenge Mr. Golueke’s declaration or the exhibits attached thereto. The Special Master found that the Golueke declaration met the requirements of the November 12 order. Ansorge Decl. ¶ 24.

2. Google Produces the Log Schemas Under the Special Master’s Supervision

Google had previously identified that for a specific type of log (“[REDACTED] logs), the engineering burdens and technical limitations associated with full compliance would be extremely hard to overcome and promptly surfaced those concerns to the Special Master, detailing the burden. *See e.g.*, Trebicka Decl. Ex. 35 (10/1/2021 Correspondence to Special Master). After careful consideration and thoughtful exchanges, the Special Master agreed. And, pursuant to the authority given the Special Master by the Court’s November 12 Order, he limited the required identification under the November 12 Order for [REDACTED] logs to “the largest 100 fields.” Trebicka Decl. Ex. 43 (03/05/2022 Special Master Meeting Tr., 67:1–25). Google produced the required fields on December 1, 2021. Ansorge Decl. ¶ 28.

Google’s request to limit its production to “the largest 100 fields” was not for the purpose of including or excluding certain fields from production. Ansorge Decl. ¶ 27. Rather, the limitation was driven by the capabilities of [REDACTED]—a tool Google maintains in the ordinary course of business capable of automatically generating a list of “the largest 100 fields” for a Sawmill log. Ansorge Decl. ¶ 27. [REDACTED] provided Plaintiffs the largest fields in the relevant data sources without the delay and burden associated with expending substantial new engineering resources on a custom solution which may or may not have been achievable. *Id.*

Google disclosed all of this. Ansorge Decl. ¶¶ 27–28. Accordingly, Plaintiffs’ accusation (Mot. at 1, 18) that Google “altered” the schema of the [REDACTED] logs to exclude “maybe_chrome_incognito” is deceptive and baseless fabrication. In reality, the “maybe_chrome_incognito” bit was not included because it is not one of “the largest 100 fields” in

1 any of the produced logs. The Special Master acknowledged “maybe it was my fault for saying
 2 [indiscernible]—produce these top **hundred** hoping that was going to be enough. Clearly, we need
 3 to refine things.” Trebicka Decl. Ex. 43, 03/05/2022 Special Master Meeting Tr., 67:1–11. The
 4 parties followed Plaintiffs’ counsel’s proposal to “refine” the output. Ansorge Decl. ¶¶ 62–66.

5 **F. Google Has Since Provided Substantially More Documents, Data, and**
 6 **Testimony Related to “Maybe_Chrome_Incognito”**

7 Since February 2022, Plaintiffs have deposed Mr. Leung for a full day and Ms. Liu for two
 8 hours. Ansorge Decl. ¶¶ 96–97. Google produced proto (source code) descriptions for the
 9 “**maybe_chrome_Incognito**” field, field names for the [REDACTED] logs that contain the
 10 “**maybe_chrome_incognito**” field, and results showing the “**maybe_chrome_incognito**” field.
 11 Ansorge Decl. ¶¶ 59, 67, 76. Plaintiffs’ third and final set of searches includes logs containing the
 12 “**maybe_Chrome_incognito,**” the “**is_chrome_incognito,**” and “**is_chrome_non_incognito_mode**”
 13 fields. Ansorge Decl. ¶ 89.

14 In March 2022, the parties also attempted to negotiate a preservation proposal. Ansorge
 15 Decl. ¶ 81. In light of Plaintiffs’ recent focus on the “**maybe_chrome_incognito**” bit, Google
 16 proposed preserving that field. *Id.* Plaintiffs’ attempt to turn that offer into Google’s *failure* to
 17 preserve (Mot. 9) is meritless. Google has consistently sought Plaintiffs’ agreement to focus on
 18 specific fields to preserve, even as Plaintiffs have insisted that Google preserve *all relevant logs*
 19 without limitation. *See, e.g.,* Dkt. 293-4. Faced with Plaintiffs’ unreasonable and unworkable
 20 position, Google moved for a protective order, detailing the technical infeasibility of preserving the
 21 quantity of information contained in these logs. Trebicka Decl. Ex. 33, February 5, 2021
 22 Correspondence to *Brown* Plaintiffs; Joint Letter Brief re: Log Preservation, Dkt. 119. Google
 23 further detailed why the make-work demand was neither necessary for—nor proportional to—
 24 Plaintiffs’ claims. *Id.*

25 That it is neither possible nor proportional to preserve all logs remains true, notwithstanding
 26 the single informal comment from Ms. Liu, a junior engineer, that Plaintiffs cite in their motion. *See*
 27 Mot. 9. Notably, when Plaintiffs asked Ms. Liu’s supervisor what it would take to change the
 28 retention period, Mr. Leung accurately testified that “log retention, which is in force on the log itself,

1 [] is not under my control” and “the retention of the production log, which include other data as
 2 well, is not controlled by this project, nor my team [including Ms. Liu].” Leung Tr. 103:4–6,
 3 107:19–21. The Court’s order relieving Google of its obligation to preserve *all* logs that may be
 4 relevant to this action was proper, and remains so. *Calhoun v. Google*, 4:20-cv-05146 (N.D. Cal.)
 5 at Dkt. 174 (adopted by reference in Dkt. 147-1 at 1).

6 **III. LEGAL STANDARD**

7 A court’s discretion to sanction a party for failing to obey a discovery order under Rule
 8 37(b)(2) is subject to two fundamental limitations: “First, any sanction must be ‘just’; second, the
 9 sanction must be specifically related to the particular ‘claim’ which was at issue in the order to
 10 provide discovery.” *Navellier v. Sletten*, 262 F.3d 923, 947 (9th Cir. 2001) (*quoting Ins. Corp. of*
 11 *Ireland, Ltd. v. Compagnie des Bauxites de Guinee*, 456 U.S. 694, 707 (1982)). The extreme
 12 sanctions Plaintiffs seek here—designating disputed facts as established (issue preclusion) and
 13 prohibiting Google from presenting arguments on key issues (evidence preclusion)—are particularly
 14 circumscribed. Issue preclusion is “rarely impose[d]” and reserved “only for ‘discovery abuse that
 15 is so extreme and prejudicial that no lesser remedy will cure the harm.’” *Natural-Immunogenics*
 16 *Corp. v. Newport Trial Grp.*, 2016 WL 11520757, at *6 (C.D. Cal. June 16, 2016) (*quoting Brighton*
 17 *Collectibles, Inc. v. RK Tex. Leather Mfg.*, 2013 WL 4716210, at *1 (S.D. Cal. Sept. 3, 2013)).
 18 Courts similarly decline to order that a party be prohibited from arguing certain facts without a
 19 showing of severe prejudice entirely absent here, and only where alternative remedies are
 20 unavailable. *See rePlanet Holdings, Inc. v. Fed. Ins. Co.*, 2020 WL 1046960, at *4 (E.D. Cal. Mar.
 21 4, 2020) (*citing Wanderer v. Johnston*, 910 F.2d 652, 656 (9th Cir. 1990)).

22 Absent a violation of a court order under Rule 37(b)(2), a court may impose discovery
 23 sanctions under its inherent authority *only* upon an express finding of bad faith. *Gomez v. Vernon*,
 24 255 F.3d 1118, 1134 (9th Cir. 2001) (“inherent-power sanctions [must] be preceded by a finding of
 25 bad faith, or conduct tantamount to bad faith”). Even reckless conduct, without “frivolousness,
 26 harassment, or improper purpose,” cannot justify sanctions entered solely under the court’s inherent
 27 power. *Fink v. Gomez*, 239 F.3d 989, 993–994 (9th Cir. 2001).

1 **IV. ARGUMENT**

2 **A. Google Neither Violated the November 12 Order Nor Abused the Discovery**
 3 **Process**

4 Plaintiffs’ Motion for Sanctions fails because Google has neither violated a discovery order
 5 nor otherwise abused the discovery process.

6 **Google Complied With the November 12 Order.** Plaintiffs claim Google violated the
 7 November 12 order “by (1) withholding the ‘maybe_chrome_incognito’ field”—as well as other
 8 unrelated fields discussed in supplemental briefing—“from Plaintiffs, and (2) [falsely] representing
 9 to the Court that it had identified all relevant sources to Plaintiffs.” Mot. 17. Both claims are wrong.
 10 As described above, detailed foundational documents in Google’s September 2021 productions
 11 disclosed both the existence of the “maybe_chrome_incognito” bit and its purpose. *See supra* § II.A.
 12 The signal on which the other two bits are based was disclosed nearly a year before that, and
 13 Plaintiffs themselves relied on a document discussing one of those bits in July 2021. *See supra*
 14 § II.D. Every single “stunning” statement Plaintiffs now claim is a “revelation” was produced to
 15 them *in or before September 2021*. *See supra* § II.A. It is unclear why Plaintiffs made no attempt
 16 to ask further questions about these bits in discovery until February 2022. The reason could have
 17 been that the Special Master already discounted Plaintiffs’ arguments concerning the reliability of
 18 using the X-Client-Data header as a proxy for Chrome Incognito traffic. Dkt. 299-1 at 2. Or, it could
 19 have been mere oversight by Plaintiffs’ counsel and the slew of experts they hired to review and
 20 analyze Google’s AEO material. Either way, Plaintiffs cannot now blame Google for it.

21 Nor was there anything false about Google’s certification that, “[t]o the best of its
 22 knowledge, Google has provided a complete list of data sources that contain information relevant
 23 to Plaintiffs’ claims.” Dkt. 331 (Nov. 12 Order) at 8. Mr. Golueke’s declaration was made after
 24 extensive internal confirmation—and was correct. Dkt. 338 at 1. Even if the declaration failed to
 25 identify logs that should have been listed, that oversight did not conceal the existence of the bits
 26 Plaintiffs focus on, which Google disclosed in multiple documents in and before September 2021.
 27 Tellingly, Plaintiffs made no objection to the list provided with Mr. Golueke’s declaration despite
 28 the fact that, at the time, Plaintiffs knew (i) “is_chrome_non_incognito_mode” resided in [REDACTED]

1 logs by no later than June 2021 and (ii) Mr. Golueke’s list (properly) did not contain any [REDACTED]
 2 logs. *See* Trebicka Decl. Ex. 15 (GOOG-BRWN-00176433 at -6434 (document produced in June
 3 2021, cited by Plaintiffs in July 2021 briefing, and stating “the is_chrome_non_incognito_mode bit
 4 is only set in tmp [REDACTED] logs” and that the bit had been “used by the [REDACTED] team”)).

5 Plaintiffs further torture the facts by accusing Google of “tampering with evidence” by
 6 “deleting the ‘maybe_chrome_incognito’ field from the schema” of a log it produced, Mot. 1, 23
 7 (emphasis removed). That is a reckless misstatement. That bit was simply one of the thousands of
 8 fields that did not meet the threshold production requirement the Special Master imposed in an effort
 9 to balance thoughtfully the Plaintiffs’ purported need for massive amounts of information with real-
 10 world technical limitations. *See supra* § II.E.2. Accordingly, the schema Google produced neither
 11 violated an order *nor* concealed from Plaintiffs that Google had logged the
 12 “maybe_chrome_incognito” bit, which was listed as a field of the [REDACTED] log in numerous emails
 13 Google produced between September and November 2021. *See supra* § II.A, E.2.

14 **Google Complied With All Its Discovery and Disclosure Obligations.** There has been none
 15 of the bad faith, frivolousness, or improper purpose required for the Court to impose discovery
 16 sanctions under its inherent authority. *Gomez*, 255 F.3d at 1134. Plaintiffs’ gross misrepresentations
 17 to the contrary, *see* Mot. 19, fall flat:

18 ***Google did not hide Mr. Leung or Ms. Liu.*** Last year alone, Google produced more than
 19 9,500 documents that mention Mr. Leung, Ms. Liu, or both—including those describing the project
 20 of inferring Chrome Incognito status. *See supra* § II.C.2.

21 ***Google Has Scrupulously Followed Its Preservation Obligations.*** Google appropriately
 22 moved for a protective order when faced with Plaintiffs’ unreasonable demands to preserve all logs
 23 that may have relevant information. Google’s position has always been that the parties must focus
 24 preservation on particular relevant fields, and agreed to include the “maybe_chrome_incognito” bit
 25 in its preservation proposal. Ansorge Decl. ¶ 81.

26 ***Chris Liao Testified Truthfully.*** Plaintiffs’ counsel asked no questions about
 27 “maybe_chrome_incognito” documents produced months before Mr. Liao’s deposition. And
 28

1 Plaintiffs’ claim that Mr. Liao testified that “any projects to identify and track Incognito traffic had
2 been discontinued” is a fabrication. *See supra* § II.C.1.

3 **B. Evidentiary Sanctions Are Entirely Unwarranted**

4 Because Google fully complied with its discovery obligations, sanctions are entirely
5 inappropriate. Even if the Court were to find that Google should have done something differently in
6 discovery, Plaintiffs cannot meet the high bar for the extreme evidentiary sanctions they seek.

7 Plaintiffs first ask the Court for issue preclusion sanctions, seeking to take as established—
8 without the need for Plaintiffs to provide *any* proof—“that (1) Google can detect event-level
9 Incognito traffic within its logs, and (2) this Incognito data is linkable to users, so that (3) the class
10 is ascertainable.” Mot. at 19. Issue preclusion, however, is a “draconian sanction[]”—a last resort to
11 cure the type of extreme prejudice that is absent here. *Nuance Comms., Inc. v. ABBYY Software*
12 *House*, 2012 WL 5904709, at *2 (N.D. Cal. Nov. 26, 2012); *see also Natural-Immunogenics Corp.*,
13 2016 WL 11520757, at *6. Tellingly, Plaintiffs cite only two cases where a court ordered issue
14 preclusion for discovery violations; in both cases the defendant provided *no* discovery despite
15 repeated orders and being forewarned of sanctions by the court.⁸ Plaintiffs also ask the Court for
16 evidence preclusion sanctions, specifically to prohibit Google from “presenting any arguments . . .
17 concerning whether Google can identify Incognito traffic within logs and whether that data is
18 linkable to users.” Mot. 20. Neither sanction is justified.

19 Courts weigh two predominant considerations when deciding whether or not to order either
20 issue preclusion sanctions: (1) the extent of the prejudice—whether it would be “just”; and (2)
21 whether a lesser remedy than the requested sanction is available. *See, e.g., Natural-Immunogenics*
22 *Corp.*, 2016 WL 11520757, at *6 (prejudice must be “extreme” and “no lesser remedy” may be
23

24 ⁸ *See Ins. Corp. of Ireland*, 456 U.S. at 707 (establishing personal jurisdiction in district court’s
25 discretion where sanctioned party “repeatedly” and “obvious[ly]” violated discovery orders,
26 “ha[d]n’t even made any effort” to provide discovery, and was “warned . . . of a possible sanction”);
27 *Zurich Am. Ins. Co. of Ill. v. World Private Sec., Inc.*, 2020 WL 8610839, at *5 (C.D. Cal. Nov. 23,
28 2020) (taking facts as established where sanctioned party “has not responded to any written
discovery request,” “appeared for properly noticed depositions,” or “provided an explanation or
excuse,” and its “counsel stated at oral argument that [it] had no good faith basis for failing to meet
its discovery obligations”). That is a far cry from the facts here.

capable of addressing the harm); *Synopsis, LLC v. Evergreen Data Sys., Inc.*, 2006 WL 2884413, at *1 (N.D. Cal. Oct. 10, 2006) (inappropriate to dispose of factual issue absent a showing that the alleged abuses have “so prejudiced [the moving party’s] ability to defend this action on the merits that such an extreme sanction would be warranted”); *rePlanet Holdings*, 2020 WL 1046960, at *5 (analysis “cuts against preclusion sanctions” where prejudice is curable and lesser sanctions are available). Both considerations overwhelmingly favor Google.

There Has Been No Prejudice. Plaintiffs spend much of their motion misconstruing Google’s enormous discovery efforts (*supra* § IV.A) as “obstruction and misconduct,” but precious few paragraphs on the actual prejudice they claim to have suffered. In any event, their claims of prejudice are either unsupported or have since been cured.

First, Plaintiffs claim that they “lack a single piece of data associated with the ‘maybe_chrome_incognito’ field.” Mot. 18. But that is demonstrably false. *See supra* § II.A & F.

Second, Plaintiffs claim that Google has thwarted their ability to respond to Google’s yet-to-be-made class certification arguments, Mot. 20, but this is also untrue. [REDACTED]

[REDACTED] using the “maybe_chrome_incognito” bit share the exact same logic (*i.e.* absence of X-Client-Data header) and business use case (*i.e.* approximation of aggregate Chrome Incognito traffic). *See supra* § II.B. Plaintiffs thus have had everything they needed to argue (wrongly) that the X-Client-Data header is the magic bullet to their class certification issues since Google produced hundreds of documents related to the [REDACTED] *See supra* § II.B. There is no prejudice here. *See Kannan*, 2020 WL 9048723, at *8 (prejudice from incomplete discovery is “limited” where moving party had “access to other sources of information about” the same topic); *see also United States ex rel. Wiltec Guam, Inc. v. Kahaluu Const. Co.*, 857 F.2d 600, 604 (9th Cir. 1988) (delayed production that occurred before sanctions hearing “did not prejudice the outcome of [the] action” even if it “caused serious inconvenience”).

Third, Plaintiffs claim that Google has “jeopardized Plaintiffs’ experts’ ability to conduct the required analysis within the time limits set by the Court.” Mot. 21 (internal quotation marks and alterations omitted). But this is wrong for all the reasons discussed above. Plaintiffs have had detailed technical information concerning the use of the X-Client Data header to approximate

1 Chrome Incognito traffic since mid-2021, and detailed documents related to
 2 “maybe_chrome_incognito” since September 2021, months before close of fact discovery. Further,
 3 Google just agreed to an extension of expert discovery deadlines at Plaintiff’s request. Dkt. 519,
 4 521. Simply stated, the circumstances here are nothing like Plaintiffs’ cited authority, in which the
 5 sanctioned parties produced complex source code “specifically written to be materially different
 6 from [code] already produced” *after* the close of discovery, *Apple Inc. v. Samsung Electronics Co.*,
 7 2012 WL 1595784, at *3 (N.D. Cal. May 4, 2012), and introduced brand new, “far more complicated
 8 and extensive new damages claims” that would require “complex[] . . . additional expert analysis”
 9 after the trial date had already been set, *Oracle USA, Inc. v. SAP AG*, 264 F.R.D. 541, 556–57 (N.D.
 10 Cal. 2009). Even in those cases, the sanctioned parties were precluded only from relying on late-
 11 introduced evidence and arguments, not from their fundamental right to make any arguments on the
 12 relevant issues at all. *See Apple*, 2012 WL 1595784, at *4; *Oracle*, 264 F.R.D. at 557.

13 Plaintiffs have identified no decision ordering preclusion sanctions on a similarly limited
 14 showing of alleged prejudice. That is no coincidence—courts in this circuit routinely *deny*
 15 preclusion sanctions on facts far less favorable to the nonmoving party. In *Nuance Communications*,
 16 *Inc.*, the defendant allegedly “produce[d] thousands of highly relevant documents after the discovery
 17 deadline had passed” and refused without explanation to allow sufficient time between document
 18 production and depositions. *Nuance Communications, Inc. v. ABBYY Software House*, 2012 WL
 19 5904709, at *3. The court denied the plaintiff’s motion for issue preclusion sanctions, holding that
 20 “if Plaintiff believed that the prejudice it suffered . . . was losing its right to conduct discovery . . .
 21 then the appropriate relief was not to ask for issue preclusion sanctions, but to seek a discovery
 22 extension so that it could actually have a chance to learn more about its claims.” *Id.* Judge Koh
 23 denied a similar request in *Guifu Li*, where the defendants had “obstructed the discovery process to
 24 avoid disclosure of [company] finances, corporate control and ownership” in violation of eight
 25 separate orders. *Guifu Li v. A Perfect Day Franchise, Inc.*, 281 F.R.D. 373, 390–94 (N.D. Cal. 2012);
 26 *see also Manchester v. Sivantos GMBH*, 2019 WL 988676 (C.D. Cal. Feb. 8, 2019) (McDermott,
 27 Mag. J.) (preclusion not appropriate sanction for failing to produce arguably responsive software
 28 prototypes, because the production request did not specifically mention them); *AndCake, Inc. v.*

1 *Sans Souci LLC*, 2015 WL 12766045, at *2 (C.D. Cal. Sept. 24, 2015) (Abrams, Mag. J.) (issue
 2 preclusion too harsh even where moving party “has been required to approach the Court twice,” “no
 3 justification has been offered” for withholding discovery,” and “there is a trial date approximately
 4 six months off”).

5 ***Lesser Remedies Are Available.*** Plaintiffs cite authorities confirming that the sanctions they
 6 seek are a bridge too far. They precluded the nonmoving party only from relying on arguments and
 7 evidence that it had not already disclosed by the time of the decision or the close of discovery. In
 8 *Hanni v. American Airlines, Inc.*, for example, putative class representatives provided incomplete
 9 interrogatory responses and failed to produce records in violation of multiple court orders to do so.
 10 2009 WL 1505286, at *3–4 (N.D. Cal. May 27, 2009) (Laporte, Mag. J.). Despite the extent of these
 11 discovery failures, the court precluded them only from “rely[ing] on any discovery provided after
 12 the close of class certification discovery in support of their motion for class certification.” *Id.* at *5.
 13 And in *Lanier v. San Joaquin Valley Officials Association*, a party failed to respond to document
 14 requests by the noticed deadline, again failed to respond by a second deadline established by court
 15 order, and finally provided only incomplete responses with baseless and improper objections. 2016
 16 WL 4764669, at *1–2 (E.D. Cal. Sept. 12, 2016) (Grosjean, Mag. J.). Recognizing that it was
 17 “entitled to preclude the introduction of evidence or issues,” the court precluded the sanctioned party
 18 only “from introducing further facts or evidence” that he had “not specifically identified and
 19 disclosed” by the court-ordered deadline—expressly permitting him to rely on “information he *had*
 20 disclosed.” *Id.* at *8. The other cases Plaintiffs cite held similarly.⁹

21
 22 ⁹ See *Sas v. Sawabeh Info. Servs.*, 2015 WL 12711646, at *3–6, 9 (C.D. Cal. Feb. 6, 2015) (Nagle,
 23 Mag. J.) (recommending an order precluding defendants from presenting trial evidence on issues
 24 for which they failed to produce compelled documents until less than a month before trial); *Apple*,
 25 2012 WL 1595784, at *3–4 (precluding party from relying on source code produced after close of
 26 discovery); *Guifu Li v. A Perfect Day Franchise, Inc.*, 2011 WL 3895118, at *4 (N.D. Cal. Aug. 29,
 27 2011) (precluding party from using declaration evidence on a topic for which it failed to produce a
 28 30(b)(6) deponent but “concluding that . . . other sanctions [are] not appropriate”); *Craftwood
 Lumber Co. v. Interline Brands, Inc.*, 2013 WL 4598490, at *13–14 (N.D. Ill. Aug. 29, 2013)
 (precluding party from presenting defenses based on evidence it “continually failed to identify,” but
 rejecting the plaintiff’s further “request [to] bar the introduction of *any* evidence in opposition to
 class certification” as overbroad); *Oracle*, 264 F.R.D. 541, 556–57 (N.D. Cal. 2009) (precluding
 plaintiff from pursuing only its late-disclosed damages theories).

1 Preclusion is particularly inappropriate here because the subject of the relevant evidence
 2 “remains a contested issue of fact.” *See Natural-Immunogenics Corp.*, 2016 WL 11520757, at *6
 3 (where affidavit denying involvement in prior lawsuit was shown to be false but extent of affiant’s
 4 involvement remained contested, “[i]ssue preclusion sanctions are not appropriate” to resolve the
 5 issue); *see also Kannan v. Apple, Inc.*, 2020 WL 9048723, at *9 (N.D. Cal. Sept. 21, 2020)
 6 (DeMarchi, Mag. J.) (declining issue preclusion because party “should be permitted to rebut
 7 [adverse] evidence with any evidence [it] has already produced”). Critically, substantial evidence
 8 produced in discovery negates each one of the three facts the Plaintiffs seek to have established.
 9 *First*, Google cannot detect “event-level Incognito traffic” within its logs. **Google can (at best)**
 10 **approximate such traffic on the basis of an unreliable inference.** *See supra* § II.B. *Second*, Plaintiffs
 11 do not even allege that the evidence purportedly withheld can establish that Incognito data is
 12 “linkable to users.” Signed-out Incognito data is, by design, **not** linkable to a user, and there is no
 13 evidence or inference to the contrary. *See id.* Finally, a finding that the class is “ascertainable” goes
 14 well beyond the purported discovery violation. Plaintiffs’ requested relief is wildly out of step with
 15 what the allegedly withheld documents say, and Plaintiffs have pointed to **no** evidence—old or
 16 new—that could support them.

17 The evidentiary sanctions Plaintiffs seek would not merely punish Google; they would also
 18 harm putative class members because the class (and therefore any recovery) would be diluted by
 19 millions of false positives. It would also create an administrative nightmare for the Court once the
 20 fiction of ascertainability falls apart at claims administration. Plaintiffs are inviting the Court to rush
 21 headlong into class certification without an identifiable class. For all the reasons above, the Court
 22 should decline their invitation.

23 **C. Jury Instructions Are Unwarranted**

24 Plaintiffs ask for a jury instruction that “Google concealed and altered evidence regarding
 25 its ability to identify Incognito traffic.” Mot. 22. Such an extreme and prejudicial remedy “should
 26 [not] be imposed casually,” *Apple Inc. v. Samsung Elecs. Co.*, 888 F. Supp. 2d 976, 994 (N.D. Cal.
 27 2012), and is wholly unsupported here. As Plaintiffs’ citations demonstrate, an adverse jury
 28 instruction is appropriate where discoverable evidence was permanently deleted or a party never

1 turned over relevant evidence at all. *See, e.g., First Fin. Sec., Inc. v. Freedom Equity Grp.*, 2016
 2 WL 5870218, at *3 (N.D. Cal. Oct. 7, 2016) (Lloyd, Mag. J.) (potentially relevant text messages
 3 permanently deleted); *Karnazes v. County of San Mateo*, 2010 WL 2672003 (N.D. Cal. Jul. 2, 2010)
 4 (James, C. Mag. J.) (key witness never appeared for deposition); *Kannan*, 2020 WL 9048723, at *9
 5 (party failed to search email account for responsive documents). That is not this case. Plaintiffs had
 6 detailed discovery on the purportedly withheld topic months before showing any interest in pursuing
 7 it. *See supra* § II.A. And once Plaintiffs *did* start asking questions, Google answered them. *See supra*
 8 § II.E.; *see also Nuance Comms.*, 2012 WL 5904709, at *2–3 (rejecting sanctions including adverse
 9 jury instruction where “Plaintiff could have mitigated the harm from any untimely production by
 10 simply conducting further discovery”).

11 An adverse instruction would also be gratuitous. Because the Court will decide whether
 12 members of Plaintiffs’ purported class are ascertainable—the **only** issue to which Plaintiffs claim
 13 the “**maybe_chrome_incognito**” bit is relevant—there is nothing on this topic for the jury to decide
 14 **at all**. Plaintiffs’ request for an adverse jury instruction bears no relation to the subject of the
 15 November 12 order or Google’s conduct that purportedly violated it, and should be denied.

16 **D. There Is No Support for Plaintiffs’ Request for Monetary Sanctions**

17 Like their other requests, the record does not support Plaintiffs’ request for monetary
 18 sanctions. But even if Google had been noncompliant as Plaintiffs allege, Plaintiffs’ reimbursement
 19 request for all Special Master fees incurred and to be incurred in these proceedings is dangerously
 20 unmoored from reason and the law. Rule 37(b) is clear that a sanctioned party must pay only
 21 expenses that are both “reasonable” and actually “caused by the failure.” Fed. R. Civ. P. 37(b)(2)(C).
 22 Accordingly, any expenses incurred prior to the sanctionable conduct are not compensable. *Liew v.*
 23 *Breen*, 640 F.2d 1046, 1051 (9th Cir. 1981). Indeed, courts generally construe Rule 37(b)(2)(C) as
 24 authorizing reimbursement solely for the expenses incurred in preparing the sanctions motion itself.
 25 *See First Fin. Sec., Inc.*, 2016 WL 5870218, at *7; *Alaska Pulp Corp. v. United States*, 41 Fed. Cl.
 26 611, 616–17 (C.F.C. 1998) (“Under Rule 37(b)(2), this court may only award the reasonable
 27 expenses incurred in bringing this Motion for Sanctions, including any expenses related to the
 28

upcoming contempt hearing.”). Should the Court grant Plaintiffs motion, it should award them compensation only for the time they spent preparing their Motion for Sanctions.

V. CONCLUSION

For the foregoing reasons, the Court should deny Plaintiffs’ request for an order requiring Google to show cause why it should not be sanctioned for discovery misconduct. At the April 21, 2022 evidentiary hearing, Google plans to examine the witnesses the Court has ordered to appear (Chris Liao, Bert Leung, and Andre Golueke). Google does not currently anticipate calling other witnesses for direct testimony, but reserves the right to alert the Court and Plaintiffs of additional witnesses that may become necessary in light of Plaintiffs’ Reply brief and Proposed Findings of Fact.

DATED: April 4, 2022 QUINN EMANUEL URQUHART & SULLIVAN, LLP

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**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA, OAKLAND DIVISION**

CHASOM BROWN, WILLIAM BYATT,
JEREMY DAVIS, CHRISTOPHER
CASTILLO, and MONIQUE TRUJILLO,
individually and on behalf of all similarly
situated,

Plaintiffs,

v.

GOOGLE LLC,

Defendant.

Case No. 4:20-cv-03664-YGR-SVK

**DECLARATION OF JOSEF ANSORGE IN
SUPPORT OF GOOGLE'S OPPOSITION
TO PLAINTIFF'S REQUEST FOR AN
ORDER TO SHOW CAUSE**

Referral: Hon. Susan van Keulen, USMJ

1 I, Josef Ansorge, declare as follows:

2 1. I am of counsel at Quinn Emanuel Urquhart & Sullivan LLP, which serves as
3 Google's outside counsel in this litigation. I submit this declaration in support of Google's
4 Opposition to Plaintiffs' Request for the Court to Issue an Order To Show Cause for Why Google
5 Should Not Be Sanctioned for Discovery Misconduct. I make this declaration of my own personal,
6 firsthand knowledge, and if called as a witness, I could and would testify competently thereto.

7 **Discovery Dispute P16**

8 2. On May 26, 2021, the parties informed the Court of a discovery dispute, designated
9 P16, related to Plaintiffs' RFP 120: "Documents sufficient to identify, during the Class Period,
10 Chrome web browser communications that did not contain any X-Client Data Header." Dkt. 177.

11 3. On June 8, 2021, the Court ordered the parties to submit supplemental briefing on
12 the following specific question: "What is Plaintiffs' factual basis to dispute Google's position that
13 there are multiple reasons why the X-Client Data field may be empty and therefore the empty field
14 does not necessarily identify class members?" Dkt. 191-1.

15 4. On July 9, 2021, the parties submitted a joint letter brief in which Plaintiffs responded
16 to the Court's specific factual question ("What is Plaintiffs' factual basis to dispute Google's
17 position that there are multiple reasons why the X-Client Data field may be empty and therefore the
18 empty field does not necessarily identify class members?") and Google responded to Plaintiffs'
19 position. *See* Dkt. 218.

20 5. On July 13, 2021, the Court appointed Douglas Brush as Special Master. Dkt. 220.
21 On the same day, the Court referred discovery dispute P16 to the Special Master. Dkt. 221.

22 6. On July 28, 2021, the parties provided the Special Master with materials including
23 briefing on P16 and sources cited in that briefing.

24 7. On September 10, 2021, the Special Master requested updates from the parties on
25 various discovery disputes, including P16.

26 8. On September 14, 2021, the parties provided the Special Master with separate
27 updates on various discovery disputes, including P16.

28

1 9. On October 6, 2021, the parties informed the Special Master that they were at an
2 impasse regarding P16 and requested his guidance. *See* Dkt. 299 ¶ 35.

3 10. On October 20, 2021, the Special Master issued a report in which he resolved P16
4 by denying Plaintiffs' request for documents sufficient to identify "Chrome web browser
5 communications that did not contain any X-Client Data Header" as overbroad. Dkt. 299-1 at 2. The
6 report included findings that the Special Master process has "led to significant progress in resolution
7 of the discovery disputes referred to the Special Master." Dkt. 299 ¶ 49.

8 11. On October 27, 2021, Plaintiffs submitted objections to the Special Master's October
9 20, 2021 report, including objections to the Special Master's ruling on P16. Dkt. 311 at 5.

10 12. On November 12, 2021, the Court issued an order finding that "the discovery
11 disputes at hand [including P16] have been briefed and argued extensively before this Court, before
12 the Special Master, and most recently again before this Court at the hearing on November 4, 2021."
13 Dkt. 331 at 2. The Court conducted a *de novo* review of the Special Master's factual conclusions
14 regarding P16 and adopted his findings. *Id.* at 3.

15 **Summary of Google's Participation in the Special Master Process**

16 13. Over the past eight months of Special Master discovery, Google:

- 17 • Participated in 23 virtual conferences with Plaintiffs before the Special
18 Master, including four meetings where seven Google engineers answered
19 deposition-style questions and performed live iterative searches;
- 20 • Disclosed ■ potentially relevant data sources, provided relevant information
21 including field names and descriptions, and ran searches across seven sources
22 using Plaintiffs' identifiers;
- 23 • Ran searches for more than ■ search terms/cookie values across ■
24 different data sources; produced tens of thousands of pages of decrypted
25 cookies, scripts, and data associated with GAIA IDs, IDE cookie values, NID
26 cookie values, Analytics CID values, and UMA IDs, provided by consenting
27 Plaintiffs and Plaintiffs' experts, including from logs that contain information
28 confidential to third party publishers which required reasonable notice to such

1 publishers for Plaintiffs' first set of searches pursuant to the November 12
2 order;

- 3 • Ran additional searches for more than [REDACTED] identifiers across [REDACTED] data sources;
4 provided tens of thousands of pages of decrypted cookies, scripts, and data
5 associated with GAIA IDs, PPIDs, IDE cookie values, NID cookie values,
6 Analytics CID values, UMA IDs, UID values, and combination of IP address
7 and User Agent values, for Plaintiffs' second set of searches pursuant to the
8 November 12 order;
- 9 • Produced all preserved data from logs that do not contain confidential third
10 party information, totaling more than [REDACTED]; and
- 11 • Sent multiple letters to the Special Master and Plaintiffs providing further
12 information, explaining concepts and processes, and responding to various
13 factual questions.

14 14. Throughout the Special Master process, Special Master Brush has consistently
15 recognized Google's good faith efforts, for example:

16 a. "I mean we have to assume there's a good-faith effort that Google has made
17 some attempts on this in a seemingly significant matter to use the tools identified to search the data
18 in a responsive and productive way. I do agree that ... greater transparency is always helpful, as
19 long as it's not being used as something to play some 'gotcha' games." Special Master Hearing Tr.
20 27:6-12, Feb. 16, 2022, a true and correct copy of excerpts is attached hereto as **Exhibit 1**;

21 b. "And, again, these are complicated issues. It's complicated technology. I
22 think we're all doing our best." *Id.*, 62:11-13;

23 c. "Again, let's not always frame everything as if there was some malice or
24 trying to hide things. I mean, this is a complicated issue." Special Master Hearing. Tr. 37:14-17,
25 Feb. 25, 2022, a true and correct copy of excerpts is attached hereto as **Exhibit 2**; and

26 d. "What's before me, yes, you have, both sides have worked together." Hr. Tr.
27 9:6-7, Special Master Hearing Tr. Mar. 5, 2022, a true and correct copy of excerpts is attached hereto
28 as **Exhibit 3**.

Details of Google's Participation in the Special Master Process and Google's Use of Logs Front Door to List Top 100 Fields For Requested Log Sources

15. Following Mr. Brush's appointment on July 13, 2021 as Special Master (Dkt. 220), on July 30, 2021 and September 15, 2021, Google participated in Zoom conferences with Plaintiffs before the Special Master.

16. On September 16, 2021, the Court issued an Order setting forth a three-step process for the Special Master discovery whereby (1) potentially relevant sources are identified, (2) additional information is provided for a subset of those sources, and (3) a further subset of those sources is then searched. Dkt. 273.

17. Pursuant to the Order and the Special Master's instructions, Google:

- Identified [REDACTED] potentially relevant data sources, including the name of the data source, a description of each data source's purpose and function, and information about the default and current retention status;
- Provided additional information about [REDACTED] sources, including schema/fields, field descriptions, and documents relevant to searching and working with the requested sources;
- Searched and produced existing data from [REDACTED] data sources selected by Plaintiffs; and
- Provided a diagram regarding relevant data, data-flow, and identifiers.

18. Google also participated in Zoom conferences with Plaintiffs before the Special Master on September 22, 2021, October 5, 2021, and October 12, 2021.

19. On October 20, 2021, the Special Master issued a report finding that "Google has engaged in and is, at the time of this Special Master's Report and Recommendation, in the process of producing relevant, responsive materials for the respective Plaintiffs under the supervision and as a direct result of the Special Master's intervention in resolving disputes referred to the Special Master." Dkt. 299 ¶ 50.

20. On November 4, 2021, the parties had a live in-person hearing before this Court regarding the Special Master's report and recommendation.

1 21. On November 12, 2021, the Court issued an Order laying out steps to conclude the
2 Special Master process. *See* Dkt. 331 at 5 (“The requests for production from Google must and will
3 come to an end as provided for in Exhibit 1.”); *see also id.* at 8 (“Google shall provide a declaration,
4 under penalty of perjury from Google, not counsel, that 1. To the best of its knowledge, Google has
5 provided a complete list of data sources that contain information relevant to Plaintiffs’ claims . . .”).

6 22. On November 15, 2021, Google participated in a Zoom conference with Plaintiffs
7 before the Special Master.

8 23. On November 18, 2021, Google submitted a declaration from Andre Golueke, a
9 Discovery Manager at Google, stating that “To the best of my knowledge and informed
10 understanding, Google has provided a complete list of sources that contain information about
11 Plaintiffs relevant to Plaintiffs’ claims.” Dkt. 338 ¶ 3.

12 24. Plaintiffs did not challenge Mr. Golueke’s declaration or the exhibits attached
13 thereto, and the Special Master team found that with the Golueke declaration Google met the
14 requirements of the November 12 order. Attached hereto as **Exhibit 4** is a true and correct copy of
15 Mr. Schmidt’s November 22, 2021 email to Counsel for Google.

16 25. On November 18, 2021, Google also submitted to the Special Master lists of field
17 and field descriptions for [REDACTED] data sources, and lists of all data sources searched prior to and
18 throughout the Special Master process, dates of the searches, all corresponding Bates numbers,
19 identifiers for the searches, names of the tools used, and full search scripts.

20 26. On November 23, 2021, Google submitted additional information in response to the
21 November 12, 2021 Order.

22 27. On November 24, 2021, Google participated in a Zoom conference with Plaintiffs
23 before the Special Master. During the meeting, Google explained the technical challenges and
24 burden associated with providing all fields for all potentially relevant [REDACTED] logs, and requested
25 to limit its production to the largest 100 fields. Google’s request was not for the purpose of including
26 or excluding certain fields from its production. Rather, the limitation was driven by the capabilities
27 of [REDACTED]—a tool Google maintains in the ordinary course of business capable of
28 automatically generating a list of the top 100 fields by size for a [REDACTED] log without the delay and

1 burden associated with expending substantial new engineering resources on a custom solution which
2 may or may not have been achievable. The Special Master revised the order to require Google to
3 provide names for the largest 100 fields for individual [REDACTED] logs.

4 28. On December 1, 2021, Google produced the ordered field names for the largest 100
5 fields for [REDACTED] logs as described in Section 3, Numbers 8 and 9 of the November 12, 2021 Order,
6 pulled by the Schema View on Google's readily available tool [REDACTED]. Attached hereto as
7 **Exhibit 5** is a true and correct copy of Google's December 1, 2021 letter to the Special Master
8 ("Along with this letter, we are providing field names for the largest 100 fields for all the additional
9 [REDACTED] logs as described in Section 3, Numbers 8-9 of the Order ...").

10 29. On December 6, 2022, Google provided additional field information regarding [REDACTED]
11 previously searched data sources and [REDACTED].

12 30. On December 8, 2022, Google provided additional field information regarding [REDACTED]
13 data sources. Google noted that, "As communicated earlier, including at the November 24
14 conference, the December 1 submission contains the top 100 fields by size for the [REDACTED] logs
15 pulled through Google's automated tool [REDACTED]." Attached hereto as **Exhibit 6** is a true
16 and correct copy of Google's December 8, 2021 letter to the Special Master.

17 31. On December 9, 2022, the Special Master acknowledged that "the undertaking of
18 efforts to pull this information in such a short period of time has been tremendous," and thanked
19 Google for its "hard work and continued cooperation in moving forward with the process." Attached
20 hereto as **Exhibit 7** is a true and correct copy of Mr. Schmidt's December 9, 2021 email to Counsel
21 for Google.

22 32. On the same day, Counsel for Plaintiffs wrote to the Special Master, raising certain
23 issues regarding Google's compliance with the November 12, 2021 Order. In response, on
24 December 10, 2021, the Special Master team stated that, "we are pleased that Google has now
25 provided Plaintiffs with field names for the potentially relevant data sources where possible ... at
26 this time, the Special Master is not going to require Defendant to provide more field descriptions
27 than have already been provided for Section 3 processes[.]" The Special Master team also
28 acknowledged that "the Special Master temporarily modified the field listing requirement to include

1 the lesser of 100 fields or all of the fields in each data source.” Attached hereto as **Exhibit 8** is a
2 true and correct copy of Mr. Schmidt’s December 10, 2021 email to the parties.

3 33. On December 15, 2021, Google participated in a Zoom conference with Plaintiffs
4 before the Special Master. During the conference, Plaintiffs requested that Google add
5 [REDACTED] as a relevant source and provide additional field information on the basis that
6 this is one of the sources “Google used as part of its mid-2020 Incognito detection analyses.” During
7 the same conference, Google agreed to add [REDACTED] as a source in the Special Master
8 process. Attached hereto as **Exhibit 9** is a true and correct copy of Plaintiffs’ December 15, 2021
9 email to the Special Master and Counsel for Google.

10 34. On the same day, Google provided the requested information. Attached hereto as
11 **Exhibit 10** is a true and correct copy of Google’s December 15, 2021 letter to the Special Master
12 (“In response to Plaintiffs’ request made today for additional information related to
13 [REDACTED], Google has used its [REDACTED] tool to compile the top 100 fields by
14 size for [REDACTED].”) (emphasis in original).

15 35. On December 15, 2021, Google received Plaintiffs’ first round search requests,
16 asking that Google search more than [REDACTED] identifiers across [REDACTED] data sources. On December 17, 2021,
17 Plaintiffs confirmed that the cookie values all came from the browsers of consenting Plaintiffs and
18 Ms. Antoinette Simmons, who was not a named Plaintiff and is not a named Plaintiff at the time of
19 writing.

20 36. One of the sources Plaintiffs selected is a log not included in Dkt. 338-1. The source,
21 called [REDACTED], is a personal log (or P-log) to which data is
22 written when a user is signed in to a Google Account. Data in p-logs is outside of the case scope
23 because Plaintiffs’ class definition is expressly limited to signed out users. Dkt. 136-1 (SAC), ¶ 192;
24 Dkt. 395-2 (TAC), ¶ 192. In any event, Google searched [REDACTED]
25 [REDACTED] and, following guidance from the Special Master, produced responsive
26 data to Plaintiffs.

27 37. On December 21, 2021, the Special Master approved Plaintiffs’ request to include
28 “[REDACTED] as a potentially relevant data source for which Brown Plaintiffs may request

1 searches be performed[.]” Attached hereto as **Exhibit 11** is a true and correct copy of Mr. Schmidt’s
2 December 21, 2021 email to the parties.

3 38. On the same day, Google made a production of data pursuant to the Special Master
4 process.

5 39. On December 24, 2021, Google made a production of data pursuant to the Special
6 Master process.

7 40. On December 26, 2021, Google received Plaintiffs’ search requests for
8 [REDACTED].

9 41. On December 29, 2021, Google made a production of data pursuant to the Special
10 Master process.

11 42. On December 30, 2021, Google submitted a letter to the Special Master in response
12 to various factual questions posed by Plaintiffs, and made another production of data pursuant to the
13 Special Master process, including search results for [REDACTED].

14 43. Between December 31, 2021 and January 20, 2022, Google made [REDACTED] additional
15 productions of data pursuant to the Special Master process.

16 44. On January 19, 2022, Google participated in a Zoom conference with Plaintiffs
17 before the Special Master.

18 45. On January 31, 2022, Google produced additional data pursuant to the Special Master
19 process and submitted a letter to the Special Master and Counsel for Plaintiffs in response to various
20 factual questions posed by Plaintiffs.

21 46. On February 2, 2022, Google participated in a Zoom conference with Plaintiffs
22 before the Special Master.

23 47. On February 14, 2022, Google agreed to Plaintiffs request to add Bert Leung as their
24 forty-third custodian; in excess of the Court-ordered cap.

25 48. On February 16, 2022, Google participated in a Zoom conference with Plaintiffs
26 before the Special Master.

27 49. On February 22, 2022, Google received Plaintiffs’ second round search requests,
28 requesting Google to search more than [REDACTED] identifiers across [REDACTED] data sources.

1 50. On February 23, 2022, Google produced additional data pursuant to the Special
2 Master process.

3 51. On February 25, 2022, Google participated in a Zoom conference with Plaintiffs
4 before the Special Master.

5 52. On February 26, 2022, Google produced additional data pursuant to the Special
6 Master process.

7 53. On February 28, 2022, four Google engineers participated in a Zoom conference with
8 Plaintiffs' counsel and experts before the Special Master, and Google engineers answered Plaintiffs'
9 experts' questions about log data and tools.

10 54. On March 1, 2022, four Google engineers participated in a Zoom conference with
11 Plaintiffs' counsel and experts before the Special Master, and Google engineers answered Plaintiffs'
12 experts' questions about log data and tools.

13 55. On the same day, Google sent a letter to the Special Master and Plaintiffs identifying
14 the [REDACTED] logs from which the [REDACTED] pulls data.

15 56. On March 2, 2022, four Google engineers participated in a Zoom conference with
16 Plaintiffs' counsel and experts before the Special Master, and Google engineers answered Plaintiffs'
17 experts' questions about log data and tools.

18 57. In providing Plaintiffs information about fields they were seeking, Google agreed to
19 do so using Google's Dremel tool, at Plaintiffs' insistence. Using this tool resulted in the inclusion
20 of an overinclusive set of fields from the underlying GWS proto.

21 58. On the same day, Google produced additional data pursuant to the Special Master
22 process and provided a status update email per the Special Master's request.

23 59. On March 3, 2022, Google participated in a Zoom conference with Plaintiffs before
24 the Special Master. On the same day, Google also sent two letters providing additional information
25 pursuant to the Special Master process, including the comments written by engineers in the
26 underlying log proto for the
27 **maybe_chrome_incognito_do_not_use_without_consulting_ads_identity_team** field:

28 "Indicates whether a request may come from Chrome Incognito. Note that the accuracy of this field

1 is not guaranteed, and this field can only be used for monitoring and analysis purposes. For more
2 information, please refer to go/detect-incognito and go/3p-blocking-browsers.”

3 60. On March 4, 2022, two Google engineers participated in a Zoom conference with
4 Plaintiffs’ counsel and experts before the Special Master, and performed live iterative searches. On
5 the same day, Google also produced additional data pursuant to the Special Master process,
6 including the top 100 fields by size for the [REDACTED] logs from which the [REDACTED]
7 [REDACTED] pulls data.

8 61. On Saturday, March 5, 2022, Google responded to Plaintiffs’ letter regarding the
9 Special Master process, in which Google provided the proto comment for the
10 is_chrome_non_incognito_mode field, agreed to follow Plaintiffs’ counsel’s suggestion to
11 produce populated fields for the [REDACTED] logs from which the [REDACTED]
12 [REDACTED] pulls data, and reiterated the technical burdens associated with providing all field names
13 for all identified logs. Attached hereto as **Exhibit 12** is a true and correct copy of Google’s March
14 5, 2022 letter. The parties subsequently followed Plaintiffs’ counsel’s proposal to create a list of
15 field names.

16 62. On the same day, Google participated in a Zoom conference with Plaintiffs before
17 the Special Master. During the conference, the Special Master stated: “maybe it was my fault for
18 saying—[indiscernible]—produce these top hundred hoping that was going to be enough. Clearly,
19 we need to refine things.” Ex. 3, Hr. Tr. 67:8-11, Mar. 5, 2022.

20 63. On March 7, 2022, Google provided a letter update pursuant to the Special Master’s
21 request.

22 64. On March 8, 2022, Google participated in a Zoom conference with Plaintiffs before
23 the Special Master.

24 65. On the same day, Google submitted to the Special Master and Plaintiffs a proposal
25 regarding the process to provide information related to [REDACTED] log sources that contain confidential
26 third-party publisher information.

27 66. On March 9, 2022, Google produced all preserved data from [REDACTED] logs that do
28 not contain confidential third-party publisher information, totaling more than [REDACTED]

1 67. On March 10, 2022, Google produced additional data pursuant to the Special Master
2 process, including fields populated by additional searches requested by Plaintiffs across the ■ logs
3 that contain the “maybe_chrome_incognito” field and three other logs, including
4 ■.

5 68. On the same day, Google provided an email update to the Special Master.

6 69. On March 12, 2022, Google submitted a status update chart to the Special Master.

7 70. On Sunday, March 13, 2022, Google participated in a Zoom conference with
8 Plaintiffs before the Special Master.

9 71. On the same day, Google submitted a status update chart to the Special Master.

10 72. On March 14, 2022, Google produced additional data pursuant to the Special Master
11 process, including additional search results for ■.

12 73. On March 15, 2022, Google participated in a Zoom conference with Plaintiffs before
13 the Special Master.

14 74. On the same day, Google produced additional data pursuant to the Special Master
15 process.

16 75. On March 17, 2022, Google produced additional data pursuant to the Special Master
17 process.

18 76. On March 18, 2022, Google produced additional data pursuant to the Special Master
19 process, including values for ■ fields Plaintiffs selected for the ■ logs that contain the
20 “maybe_chrome_incognito” fields and three other logs including ■.

21 77. On the same day, Google submitted a data preservation proposal that included “the
22 ■ (based on is_chrome_non_incognito and is_chrome_incognito boolean
23 fields)” and “the Display Ads dashboard data (based on maybe_chrome_incognito boolean field).”
24 (emphasis in original).

25 78. On the same day, the Special Master urged Plaintiffs to provide search terms and
26 criteria for the final round of searches “prior to business opening Monday EDT, March 21, 2022.”
27 Attached hereto as **Exhibit 13** is a true and correct copy of Mr. Schmidt’s March 18, 2022 email to
28 the parties.

1 79. On March 21, 2022, the Special Master again urged Plaintiffs to provide search terms
2 and criteria for the final round of searches. Attached hereto as **Exhibit 14** is a true and correct copy
3 of Mr. Schmidt's March 21, 2022 email to the parties.

4 80. On March 21, 2022, the Special Master requested to confer with the parties in order
5 to "close[] out the only two open issues: 1. Final searches – what terms and data sources will be run
6 on the final searches of data. 2. Closing out the preservation plan." The Special Master also noted
7 that "To be crystal clear: This is the end of the process. We will not be arguing new issues or
8 expanding discovery." Attached hereto as **Exhibit 15** is a true and correct copy of Special Master
9 Brush's March 22, 2022 email to the parties.

10 81. On March 22, 2022, the parties met and conferred and Plaintiffs requested the
11 **maybe_chrome_incognito_do_not_use_without_consulting_ads_identity_team** be added to
12 Google's preservation proposal. On the same day, Google submitted an updated preservation
13 proposal which included this field.

14 82. On March 23, 2022, Google participated in a Zoom conference with Plaintiffs before
15 the Special Master.

16 83. On the same day, Google provided additional information requested by the Special
17 Master, including deposition transcript and relevant exhibit used at Dr. Sadowski's 30(b)(6)
18 deposition regarding the **is_chrome_non_incognito_mode** and **is_chrome_incognito** Boolean
19 fields for the [REDACTED] logs. Google also indicated that "to the extent Plaintiffs select any of [the]
20 [REDACTED] log sources for their next round of searches—and the Special Master approves the
21 requests—Google agrees to conduct searches over those sources and produce responsive results."
22 Attached hereto as **Exhibit 16** is a true and correct copy of counsel for Google's March 23, 2022
23 email to the Special Master and counsel for Plaintiffs.

24 84. On March 25, 2022, Google produced additional data pursuant to the Special Master
25 process.

26 85. On March 26, 2022, the Special Master queried "where are we in the search
27 negotiations and a proposed plan for the final searches." In response, Google indicated that it is
28 "ready to initiate the final set of searches," and "look(s) forward to receiving the final set of search

1 requests from Plaintiffs[.]” Attached hereto as **Exhibit 17** is a true and correct copy of counsel for
 2 Google’s March 26, 2022 email to the Special Master and counsel for Plaintiffs.

3 86. On March 28, 2022, Google produced additional information pursuant to the Special
 4 Master process and again urged Plaintiffs to provide the search terms and criteria for the final round
 5 of search under the Special Master process.

6 87. On March 31, 2022, the Special Master instructed that “Plaintiffs are to provide final
 7 searches at this point.” On the same day, Google participated in a Zoom conference with Plaintiffs
 8 before the Special Master. Attached hereto as **Exhibit 18** is a true and correct copy of the Special
 9 Masters’ March 31, 2022 email to counsel for Plaintiffs and counsel for Google.

10 88. On April 1, 2022, Google provided the proto comments for the **is_chrome_incognito**
 11 field.

12 89. On April 2, 2022, Plaintiffs selected final searches in the Special Master process,
 13 including searches of log sources that “have an incognito detection bit” and are at issue in Plaintiffs’
 14 motion for sanctions. Attached hereto as **Exhibit 39** is a true and correct copy of search parameters
 15 forwarded from the Special Master team to Google on April 2, 2022.

16 **Additional Productions and Discovery Related To Inferring Incognito Traffic Through**
 17 **Absence of X-Client-Data Header**

18 90. Mr. Leung’s name appears in approximately 9,500 documents produced between
 19 April 2021 and December 2021.

20 91. From June through November 2021, there were at least 12 documents produced,
 21 which were all emails from Bert Leung himself and discussed various Incognito related projects and
 22 tasks (*e.g.*, **Inferring Incognito traffic from server side**).¹

23 92. Google has produced documents related to [REDACTED] since at least April
 24 9, 2021. *See e.g.*, GOOG-BRWN-00027543, a true and correct copy attached hereto as **Exhibit 19**;
 25 GOOG-BRWN-00028978, a true and correct copy attached hereto as **Exhibit 20**. Mention of and
 26

27 ¹ *See e.g.*, GOOG-BRWN-00234190, GOOG-BRWN-00234726, GOOG-BRWN-00234898,
 28 GOOG-BRWN-00242105, GOOG-BRWN-00242324, GOOG-BRWN-00386196, GOOG-BRWN-
 00386197, GOOG-BRWN-00403456, GOOG-BRWN-00405320, GOOG-BRWN-00405532,
 GOOG-BRWN-00750965. True and correct copies are attached hereto as Exhibits 27 through 37.

1 details regarding [REDACTED] have been laid out in numerous documents produced since
 2 April 2021: *see e.g.*, GOOG-BRWN-00027543 (“Ads Log Types”) Ex. 19; GOOG-BRWN-
 3 00146410 (“Sell-side Access Only Interaction Logs”), a true and correct copy attached hereto as
 4 **Exhibit 21**; GOOG-CABR-03815890 (“Digest for cafe-team@google.com - 25 updates in 13
 5 topics”), a true and correct copy attached hereto as **Exhibit 22**; GOOG-CABR-03848701 (“Digest
 6 for cafe-team@google.com - 25 updates in 10 topics”), a true and correct copy attached hereto as
 7 **Exhibit 23**; GOOG-CABR-05280756 (“Re: Ramp-up Plan for ChromeGuard”), a true and correct
 8 copy attached hereto as **Exhibit 24**; GOOG-CABR-05281934 (“Re: ChromeGuard ramping from
 9 50% to 100% on 7/13 (Monday)”), a true and correct copy attached hereto as **Exhibit 25**; GOOG-
 10 CABR-05282988 (“Clickserver Privacy Landscape 2020”), a true and correct copy attached hereto
 11 as **Exhibit 26**. Google has produced hundreds of documents related to this method to infer
 12 aggregated Incognito web traffic.

13 93. In September 2021, Google produced the detailed foundational documents for
 14 **Project Detect 3P Cookies Blocking Browsers**—the Phase 1 technical design document GOOG-
 15 CABR-00544408 (“**Detect 3P Cookies Blocking Browsers Technical Design**” authored by Mandy
 16 Liu produced on September 1, 2021), Trebicka Decl. Ex. 10; and the corresponding master design
 17 document GOOG-CABR-00901891 (“**Detect 3P Cookies Blocking Browsers**” authored by Bert
 18 Leung produced on September 2, 2021), Trebicka Decl. Ex. 12. From September 2021 through
 19 November 2021, Google produced numerous additional documents regarding the project and the
 20 **maybe_chrome_incognito** bit. For example:

21 a. Additional project technical design document dated May 4, 2021 showing it
 22 was “APPROVED” by four separate “Approvers” and produced September 24, 2021. Trebicka
 23 Decl. Ex. 13 (GOOG-CABR-03668216);

24 b. Additional master design document dated July 16, 2020 produced on October
 25 6, 2021. Trebicka Decl. Ex. 20 (GOOG-CABR-04470006); Trebicka Decl. Ex. 21 (GOOG-CABR-
 26 04796629) (same produced October 29, 2021);

27 c. June 4, 2021 email from Mandy Liu identifying bit and [REDACTED] produced
 28 November 24, 2021. Trebicka Decl. Ex. 22 (GOOG-CABR-05285402);

1 d. June 10, 2021 email from a Google code reviewer identifying the bit and
2 providing “Approval” of project’s computer code produced November 24, 2021. Trebicka Decl.
3 Ex. 23 (GOOG-CABR-05285407);

4 e. June 10, 2021 email from Mandy Liu to the Google code reviewer identifying
5 the bit and providing a modified changelist related to the project produced November 24, 2021.
6 Trebicka Decl. Ex. 24 (GOOG-CABR-05285409); Trebicka Decl. Ex. 25 (GOOG-CABR-
7 05285410) (similar);

8 f. June 12, 2021 email from a Google code reviewer identifying the bit and
9 showing Googler comments related to the project produced on November 24, 2021. Trebicka Decl.
10 Ex. 26 (GOOG-CABR-05285411);

11 g. June 15, 2021 email from Google code reviewer identifying the bit and
12 providing “APPROVAL” of project’s computer code produced November 24, 2021. Trebicka Decl.
13 Ex. 27 (GOOG-CABR-05285414);

14 h. June 15, 2021 email from Mandy Liu identifying the bit and [REDACTED] produced
15 September 24, 2021. Trebicka Decl. Ex. 16 (GOOG-CABR-03668991);

16 i. June 16, 2021 email from a Google code reviewer identifying the bit and
17 providing “APPROVAL” of project’s computer code produced November 24, 2021. Trebicka Decl.
18 Ex. 28 (GOOG-CABR-05285416);

19 j. June 16, 2021 emails identifying the bit and providing modified changelist
20 related to the project produced on November 24, 2021. Trebicka Decl. Ex. 29 (GOOG-CABR-
21 05285418); Trebicka Decl. Ex. 30 (GOOG-CABR-05285420);

22 k. June 16, 2021 email identifying the bit and showing Googler comments
23 related to the project produced on November 24, 2021. Trebicka Decl. Ex. 31 (GOOG-CABR-
24 05285422);

25 l. June 21, 2021 emails identifying the bit and [REDACTED] produced September 24,
26 2021. Trebicka Decl. Ex. 17 (GOOG-CABR-03669472); Trebicka Decl. Ex. 18 (GOOG-CABR-
27 03669574).

28

EXHIBIT 3

**Redacted Version of
Document Sought
to be Sealed**

CHASOM BROWN, ET AL. versus GOOGLE, LLC, ET AL.
Hearing on 03/05/2022

1 UNITED STATES DISTRICT COURT
2 NORTHERN DISTRICT OF CALIFORNIA
3 CASE NO.: 4:20-03664-YGR-AVK
4
5 CHASOM BROWN, MARIA NGUYEN and
6 WILLIAM BYATT, individually and on
7 Behalf of all other similarly situated,
8 Plaintiffs,
9 versus
10 GOOGLE, LLC and ALPHABET, INC.,
11 Defendants.
12 _____/

13 TRANSCRIPT OF CIVIL CONTEMPT HEARING
14
15 DATE: March 5, 2022
16 PLACE: Remotely via Zoom
17 BEFORE: Special Master Douglas Brush
18
19

20 These proceedings were digitally recorded and the
21 following was transcribed by:

22 Denise D. Wilcox
23 Court Reporter/Transcriptionist
24 King Reporting
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CHASOM BROWN, ET AL. versus GOOGLE, LLC, ET AL.
Hearing on 03/05/2022

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1 A-P-P-E-A-R-A-N-C-E-S

2

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17 ALSO PRESENT:

18 TRACY GAO, Law Clerk at Quinn, et al

TIMOTHY SCHMIDT

19

DAVID STRAITE

20

21

22

23

24

25

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1 extremely helpful, but I think that we can still
2 proceed, you know, to do what we can here. But I
3 just -- -- [indiscernible.]

4 UNKNOWN SPEAKER: I think noted, but given the
5 gravity of the position you are in right now with
6 the court, I think it would behoove us to look at
7 this from a more practical, non-technical matter as
8 well, of you know, where the compromise is going to
9 be, because the experts are less capable of making
10 those decisions, I would say, than you.

11 UNKNOWN SPEAKER: And one final thing, as long
12 as we're just doing these for the record, Special
13 Master Brush, I heard you to say a little earlier,
14 and I think you've said in some of our prior
15 sessions, that you recognize that the parties have
16 been working in good faith and working hard on
17 this, and I just wanted to, you know, give you the
18 opportunity to say if you think that's not so, just
19 so we have a clear record, if it ever becomes an
20 issue.

21 UNKNOWN SPEAKER: I just want to be clear for
22 the record, that that's also for what's in front of
23 you, Special Master Brush. So, I -- that's nice,
24 Andy, that you want to, you know, make arguments on
25 that regarding other proceedings, but you know, I

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1 think in terms of the Special Master, I do think
2 that we're trying to move forward together.

3 SPECIAL MASTER BRUSH: On this specific issue
4 in front of me, I'm -- [indiscernible] -- I have
5 blinders on to the rest of the world, on all the
6 other issues on this case. What's before me, yes,
7 you have, both sides have worked together.

8 What I don't want to see and I'll go on the
9 record on, is all that effort wasted, all that good
10 faith wasted, at the last second. I mean, because
11 we have to finish this and if it can't be finished,
12 none of that will have the type of weight that it
13 has now, unless we can say it had a favorable
14 outcome.

15 So, I think there's portions of that that I
16 agree with, but understanding is it's what's in
17 front of us right now that's going to determine
18 whether all these efforts of today are really going
19 to matter. So -- and this is where we have to
20 finish strong and get the stuff.

21 UNKNOWN SPEAKER: Right. And Special Master,
22 I just want to reserve for the record real fast
23 that there is this one issue on their response to
24 number two, issue number 2, regarding the
25 production of schema via the top 100 fields, in

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1 which not only were there logs for the incognito
2 being not produced, but the fields were also not
3 produced. I just ask that you reserve your opinion
4 on that until we actually go through it. And
5 please note that that issue is also in front of
6 both the presiding judge, and also Judge Este Kay,
7 for the sanctions motion we have keyed up in April.

8 SPECIAL MASTER BRUSH: Well, I missed that.

9 UNKNOWN SPEAKER: So, I don't want Mr. Shipero
10 trying to backdoor that because, you know, I think
11 that would be a little too cute for the purposes of
12 this proceeding, unless you disagree, Mr. --
13 [indiscernible] --

14 SPECIAL MASTER BRUSH: I don't think that was
15 the interpretation that I had of what Mr. Shipiro
16 said.

17 UNKNOWN SPEAKER: I agree.

18 SPECIAL MASTER BRUSH: So, let's really --
19 let's jump into this. We're on the record that
20 we're holding hands here and getting through this,
21 but again, if we don't, we'll go on record saying
22 how happy we are with the process as much as we
23 want, and what's there, but we need to go through
24 this letter piece by piece and get these things
25 closed out.

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1 produced the 100 fields, I think we sat -- there's
2 a portion of that that's a little bit of a
3 bombshell, which I don't think is necessary in --
4 in this current session, but we want to make sure
5 that those [REDACTED] types of fields are actually
6 produced for all the schema identified. Right.
7 Like, that's what we're trying to figure out,
8 because it does go to identifiability and join
9 ability. That's why. And we -- and in our
10 defense, Special Master, we've laid this out pretty
11 clearly ever since December.

12 MR. MCGEE: Right. And Special Master Brush,
13 there's -- there's one or two bits that, you know,
14 we continue to look at and that continue to peak
15 our interests, but they don't fall with this --
16 within this 100, and Google says, "Sorry, it's just
17 going to be too hard."

18 I -- there's got to be a way to craft a search
19 where we can get -- and where we can get this
20 information. I mean, it exists on their servers.
21 Just because it's not in the top 100, doesn't mean
22 that we should not be entitled to it.

23 (Whereupon, there were overlapping speakers.)

24 SPECIAL MASTER BRUSH: In the interest of
25 time, we're short now, so what I want to throw this

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1 to is to Google's counsel. Do you understand
2 there's a bit of a dilemma there of we are all
3 trying to craft more or refine searches to reduce
4 the workload on both Google systems and engineers.

5 What do you propose is the best way to provide
6 better insight that allows more targeted searching
7 that will aid this. You know, as opposed -- you
8 know, maybe it was my fault for saying --
9 [indiscernible] -- produce these top hundred hoping
10 that was going to be enough. Clearly, we need to
11 refine things.

12 What would Google recommend, knowing their
13 systems better than anybody else, how we refine
14 some of these searches?

15 MR. MAO: So, if there's an option for a
16 specific refinement, the easiest way to do it would
17 be to focus on very specific fields, and I want to
18 be clear that that's different from the [REDACTED]
19 categories that Plaintiffs were referring to just
20 now. I mean, those -- when they state everything
21 that has an IP address, that -- that's not a
22 specific field.

23 So, if we have a field and an ID, and a time
24 period, those searches, of course, become much more
25 narrow and targeted. I should add that we've been

CHASOM BROWN, ET AL. versus GOOGLE, LLC, ET AL.
Hearing on 03/05/2022

Page 68

1 proceeding so far by just providing, you know, all
2 the information that would be keyed to the
3 particular ID in that storage.

4 So, this would be smaller and more focused;
5 however, what we have been doing so far also covers
6 the requirement that Plaintiffs have of some kind
7 of an organization or schema, because when they
8 received the data, they receive it by the different
9 field names that exist for that record, and so it
10 serves double purpose, without having to be
11 sequential and us having to follow one or the
12 other.

13 So, what we are proposed is maintain the
14 process we have had so far for the searches that
15 are under way for the next iteration of searches
16 that Plaintiffs provide. If we need a very quick
17 test account search, we narrow it and focus the
18 searches down to ID, URL, specific IP address of
19 the device, and user agent, the key fields that are
20 identified in the complaint. Following those
21 parameters will make it much more difficult. It
22 also doesn't run the risk of pulling in any
23 publisher data, so it slows down the entire end of
24 -- or negates the notification process, and that
25 would be our proposal on how to proceed.

CHASOM BROWN, ET AL. versus GOOGLE, LLC, ET AL.
Hearing on 03/05/2022

Page 111

1 STATE OF VIRGINIA)
2 COUNTY OF ROCKBRIDGE)


3 I, DENISE D. WILCOX, Court Reporter and
4 Digital Transcriptionist, do hereby certify that I
5 was authorized to and did transcribe the foregoing
6 proceeding from a digital audio recording, Brown v,
7 Google, and pages 1-111 of the transcript are a
8 true and correct record of the proceeding to the
9 best of my ability.

10

11 DONE AND DATED this 8th day of March,
12 2022, at Goshen, Rockbridge County, Virginia.

13

14



15

16

DENISE D. WILCOX
Court Reporter &
Digital Transcriptionist

17

18

19

20

21

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23

24

25

EXHIBIT 4

**Redacted Version of
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to be Sealed**

Geoffrey Grundy

From: Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Sent: Monday, November 22, 2021 7:50 PM
To: Tracy Gao; QE Brown; Douglas Brush
Subject: Re Brown v. Google LLC (N.D. Cal. Case No. 20-cv-03664) - Confidential

[EXTERNAL EMAIL from timothy.schmidt@accelconsulting.llc]

Ms. Gao, et. al.,

Thank you for putting together the materials you provided last week. We have reviewed the contents of the various packages you provided. In order for us to effectively review the documents, we are associating items to the Order's Exhibit 1 based upon the section and where applicable, one or more numbered items within that section.

Our evaluation of the results provided us for content and compliance with the Order follows:

1. Section 1 (searched data sources listing, search dates, bates ranges) – The Special Master finds that the document provided, 2021-11-18 Brown Omnibus Sheet.xlsx (Tab 1) satisfies the Order's requirements.
2. Section 1 (declaration) – The Special Master finds that the documents found within the file, 11.18.2021.zip (contains files: 2021-11-18 Declaration [dckt 338_0].pdf, Brown - Exhibit A - REDACTED COPY.pdf, Brown - Exhibit A - UNREDACTED COPY.pdf, Brown - Exhibit B - REDACTED COPY.pdf, and Brown - Exhibit B - UNREDACTED COPY.pdf) satisfy the Order's requirements.
3. Section 2 – The Special Master finds that the document provided, 2021-11-18 Brown Omnibus Sheet.xlsx (Tab 2) satisfies the Order's requirements.
4. Section 3, Number 1-7 – The Special Master finds that the information found in Tabs 2 and 3.1-3.7, 2021-11-18 Brown Omnibus Sheet.xlsx, 2021-11-18 Brown & Calhoun - Special Master Submission in Response to Nov. 12 Order.pdf, and 2021-11-18 Documentation on Data Sources and Tools.pdf will satisfy the Order's requirements once Google confirms that ALL field names and descriptions have been provided for all data sources described in Section 3, Number 1-7 of Exhibit 1 of the Order. If ALL field names and their descriptions have not been provided for the relevant data sources, they will need to be provided to the Special Master and confirmed to have been provided in full to the Special Master by November 23, 2021.
5. Section 3, Number 8 – While the Special Master has been provided the names of the data sources and tools used to carry out searches on the data sources searched before November 12, 2021 that are outside of those identified in Section 3, Numbers 1-7, the Special Master has not been able to find that the remaining information ordered has been provided in full, specifically, schemas, field names, and field descriptions for the data sources previously searched for the Brown case excepting those identified in Section 3, Number 1-7. This information, including Schema, list of all fields, description of each field must be provided to the Special Master by November 23, 2021.
6. Section 4, Number 1 – The Special Master assumes that previous records provided from searches of data sources identified here have been provided to Plaintiffs. Google will confirm to the Special Master that Productions listed on Tab 1, "Bates Range" field in 2021-11-18 Brown Omnibus Sheet.xlsx contained full records rather than incomplete records. If this is not the case, and full records were not provided as part of the relevant productions, Google will produce full records to the Special Master for produced search term hits by November 23, 2021.

Plaintiffs have provided the following input with regards to their required tasks:

1. Section 3, Number 9 – Plaintiffs have requested, and the Special Master has approved their request for lists of all fields, descriptions of all fields in all data sources not included in Section 3, Numbers 1-8 that

have not yet been searched. Also approved is the request for lists of tools (including instructions) used to search all these data sources. The Special Master, in the interest of efficiency, is not approving, at this time. The Special Master reserves the right at any time to require Google provide schemas for any or all potentially relevant data sources to the Plaintiffs. As additional data sources not previously disclosed to the Special Master were identified in Google's disclosure, Google will be required to add these data sources to those included in Section 3, Number 9. These data sources are as follows:

- i. [REDACTED]
- ii. [REDACTED]
- iii. [REDACTED]
- iv. [REDACTED]
- v. [REDACTED]
- vi. [REDACTED]
- vii. [REDACTED]
- viii. [REDACTED]
- ix. [REDACTED]
- x. [REDACTED]
- xi. [REDACTED]
- xii. [REDACTED]
- xiii. [REDACTED]
- xiv. [REDACTED]
- xv. [REDACTED]
- xvi. [REDACTED]
- xvii. [REDACTED]
- xviii. [REDACTED]
- xix. [REDACTED]

We are providing you with access to the relevant information referenced in the above email via the following ShareFile folder accessible only to Ms. Gao. You will receive a ShareFile notification shortly.

We will provide Google and Plaintiffs a full listing of data sources for which Google will provide the List of fields and their descriptions as well as the Tools used for searching each data source and the requisite instructions for the Order's Exhibit 1, Section 3, Numbers 8 and 9. For those data sources Google has already provided the previously mentioned information, Google need not provide it a second time.

Section 3, Number 9 Plaintiff's task has been completed. Google is required to provide lists of all fields, and descriptions of all fields in all data sources not included in Section 3, Numbers 1-8 that have not yet been searched by 11/29/2021.

Thank you,
Tim Schmidt

Timothy Schmidt

Consultant

M 202.577.5302

E timothy.schmidt@accelconsulting.llc

Accel Consulting LLC

BOULDER, CO 80301

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EXHIBIT 5

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quinn emanuel trial lawyers | washington, dc

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WRITER'S EMAIL ADDRESS
josefansorge@quinnemanuel.com

HIGHLY CONFIDENTIAL – SPECIAL MASTER’S EYES ONLY

December 1, 2021

VIA E-MAIL

Special Master Douglas Brush
(douglas.brush@accelconsulting.llc)
Accel Consulting, LLC

Timothy Schmidt
(timothy.schmidt@accelconsulting.llc)
Accel Consulting, LLC

Re: Google’s Submissions in Response to November 12 Order Adopting in Part and
Modifying in Part the Special Master’s Report and Orders on Referred Discovery Issues
Dkt. 377, *Calhoun v. Google LLC*, Case No. 5:20-cv-05146-LHK-SVK (N.D. Cal.) and
Dkt. 331, *Brown v. Google LLC*, Case No. 5:20-cv-03664-LHK-SVK (N.D. Cal.)

Dear Special Master Brush, Mr. Schmidt:

Thank you for the productive meeting on November 24 regarding Google’s submissions in
response to the Court’s November 12 Order Adopting in Part and Modifying in Part the Special
Master’s Report and Orders on Referred Discovery Issues in *Brown v. Google* (Dkt. 331) and
Calhoun v. Google (Dkt. 377). Google is hereby providing additional information as requested at
the meeting.

Brown v. Google

Along with this letter, we are providing field names for the largest 100 fields for all the
additional [REDACTED] logs as described in Section 3, Numbers 8-9 of the Order ([REDACTED] logs in total),
aside from the following logs:

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MUNICH | NEUILLY-LA DEFENSE | NEW YORK | PARIS | PERTH | SALT LAKE CITY | SAN FRANCISCO | SEATTLE | SHANGHAI | SILICON VALLEY |
STUTTGART | SYDNEY | TOKYO | WASHINGTON, DC | ZURICH

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- [REDACTED]: There is no recent data in this log. Therefore, the tool Google uses to pull the field names, i.e. the Schema View on [REDACTED], has nothing to study in order to return the field names.
- [REDACTED]: same as above.
- [REDACTED]: same as above.

Calhoun v. Google

Along with this letter, we are providing search results for the [REDACTED] as required under Section 6 of the Order, and field names for the largest 100 fields for all the additional [REDACTED] logs described in Section 3, Numbers 2-5 of the Order ([REDACTED] logs in total), aside from the following logs:

- [REDACTED]: This is a collection of logs, not a log itself. The logs in the collection are [REDACTED], [REDACTED], and [REDACTED]. We are providing field names for those logs along with this letter.
- [REDACTED]: There is no recent data in this log. Therefore, the tool Google uses to pull the field names, i.e. the Schema View on [REDACTED], has nothing to study in order to return the field names.
- [REDACTED]: same as above.
- [REDACTED]: same as above.
- [REDACTED]: same as above.
- [REDACTED]: same as above.
- [REDACTED]: same as above.

Please do not hesitate to contact us if you have any questions or require additional information.

Respectfully,

QUINN EMANUEL URQUHART & SULLIVAN, LLP



Josef Ansoerge

EXHIBIT 6

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quinn emanuel trial lawyers | washington, dc

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WRITER'S EMAIL ADDRESS
josefansorge@quinnemanuel.com

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December 8, 2021

VIA E-MAIL

Special Master Douglas Brush
(douglas.brush@accelconsulting.llc)
Accel Consulting, LLC

Timothy Schmidt
(timothy.schmidt@accelconsulting.llc)
Accel Consulting, LLC

Re: Google’s Submissions in Response to November 12 Order Adopting in Part and Modifying in Part the Special Master’s Report and Orders on Referred Discovery Issues Dkt. 377, *Calhoun v. Google LLC*, Case No. 5:20-cv-05146-LHK-SVK (N.D. Cal.) and Dkt. 331, *Brown v. Google LLC*, Case No. 5:20-cv-03664-LHK-SVK (N.D. Cal.)

Dear Special Master Brush, Mr. Schmidt:

Thank you for your December 7 email regarding Google’s submissions in response to the Court’s November 12 Order Adopting in Part and Modifying in Part the Special Master’s Report and Orders on Referred Discovery Issues in *Brown v. Google* (Dkt. 331) and *Calhoun v. Google* (Dkt. 377). Google is hereby providing additional information as requested in the email.

Brown v. Google

In response to A1-A5 from the December 7 email, Google is hereby providing additional information regarding the five data sources in the spreadsheet titled “2021-12-08 Brown - Special Master Submission” along with this letter. Among these sources, [REDACTED] and [REDACTED] draw on existing tooling Google has to look up consent, provide TakeOut data, and respond to law enforcement requests. The tooling can only be

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utilized to search data with Google Account information, and is categorically different from the other data sources Google has identified that may contain data relevant to this case.

In response to number D from the December 7 email and based on a reasonable investigation, Google hereby confirms that the fields identified reflect all fields for the corresponding data sources, with the exception of (1) the fields for [REDACTED] logs that Google provided on December 1, 2021, and (2) the fields for certain [REDACTED] Corpora that were included in the produced data. As communicated earlier, including at the November 24 conference, the December 1 submission contains the top 100 fields by size for the [REDACTED] logs pulled through Google’s automated tool [REDACTED]. As to the [REDACTED] Corpora where Google pointed to the produced data, fields included in the data were determined by the user’s activity. Therefore, only relevant fields were included.

Calhoun v. Google

In response to number A1 from the December 7 email, Google is hereby providing a searchable PDF of document GOOG-CALH-00039102 along with this letter.

In response to numbers A2-A4 from the December 7 email, Google is hereby providing additional information regarding the three data sources in the spreadsheet titled “2021-12-08 Calhoun - Special Master Submission” along with this letter. Among these sources, [REDACTED] and [REDACTED] draw on existing tooling Google has to look up consent, provide TakeOut data, and respond to law enforcement requests. The tooling can only be utilized to search data with Google Account information, and is categorically different from the other data sources Google has identified that may contain data relevant to this case.

In response to number D from the December 7 email and based on a reasonable investigation, Google hereby confirms that the fields identified reflect all fields for the corresponding data sources, with the exception of (1) the fields for [REDACTED] logs that Google provided on December 1, 2021, and (2) the fields for certain [REDACTED] Corpora that were included in the produced data. As communicated earlier, including at the November 24 conference, the December 1 submission contains the top 100 fields by size for the [REDACTED] logs pulled through Google’s automated tool [REDACTED]. As to the [REDACTED] Corpora where Google pointed to the produced data, fields included in the data were determined by the user’s activity. Therefore, only relevant fields were included.

Please do not hesitate to contact us if you have any questions or require additional information.

Respectfully,

QUINN EMANUEL URQUHART & SULLIVAN, LLP

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A handwritten signature in black ink, appearing to read "Josef Ansorge". The signature is written in a cursive, flowing style.

Josef Ansorge

EXHIBIT 7

**Redacted Version of
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Geoffrey Grundy

From: Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Sent: Thursday, December 9, 2021 2:51 PM
To: Tracy Gao; Josef Ansoorge
Cc: QE Brown; QE Calhoun; Douglas Brush
Subject: Re: Brown & Calhoun - Special Master Submission - Confidential

[EXTERNAL EMAIL from timothy.schmidt@accelconsulting.llc]

Ms. Gao, Mr. Ansoorge,

We are in receipt of your email, and we have downloaded and reviewed the information you provided with respect to the outstanding Section 3 items for Brown and Calhoun. We understand that the undertaking of efforts to pull this information in such a short period of time has been tremendous and we thank you again for your hard work and continued cooperation in moving forward with the process.

We will be providing the relevant information to each of the parties so that they can begin their selection processes and provide you their choices in the very near future:

Brown – will be providing the following by close of business EST, Friday, December 10, 2021:

1. The names of [REDACTED] data sources that will be searched from the list of [REDACTED] in addition to the [REDACTED] data sources called out in Section 3, main paragraph,
2. Search terms for each of the data sources that will be searched.

Calhoun – will be providing the names of any additional data sources that meet the criteria of Section 3, number 6 by no later than close of business EST, Tuesday, December 14, 2021; the delay here is due to one of the Calhoun Plaintiff's experts having to respond to a family emergency, for which they have been granted an extension.

Special Master Brush would like to remind you that the requirement for Google to provide field definitions and schemas for all data sources was only temporarily suspended to expedite matters and should the Special Master determine that it becomes necessary, you are still under orders to provide these elements for any or all potentially relevant data sources based on his discretion.

Thank you,
Tim Schmidt

Timothy Schmidt

Consultant

M 202.577.5302

E timothy.schmidt@accelconsulting.llc

Accel Consulting LLC

BOULDER, CO 80301

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From: Tracy Gao <tracygao@quinnemanuel.com>

Date: Wednesday, December 8, 2021 at 6:13 PM

To: Douglas Brush <douglas.brush@accelconsulting.llc>, Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Cc: QE Brown <qebrown@quinnemanuel.com>, QE Calhoun <qecalhoun@quinnemanuel.com>
Subject: Brown & Calhoun - Special Master Submission

Dear Special Master Brush, Mr. Schmidt:

Below please find a SendFile link to Google's letter and submission in response to Mr. Schmidt's December 7 email regarding Google's submission pursuant Magistrate Judge van Keulen's November 12, 2021 Order issued in *Brown v. Google* (Dkt. 331) and *Calhoun v. Google* (Dkt. 377).

<https://sendfile.quinnemanuel.com/pkg?token=5698dd91-c112-45ef-a24b-1c0b7a33da95>

I'll send password under separate cover.

Respectfully,
Tracy

Tracy Gao
Quinn Emanuel Urquhart & Sullivan, LLP

1300 I Street, NW, Suite 900
Washington, D.C. 20005
[202-538-8327](tel:202-538-8327) Direct
[202-538.8000](tel:202-538-8000) Main Office Number
[202.538.8100](tel:202-538-8100) FAX
tracygao@quinnemanuel.com
www.quinnemanuel.com

EXHIBIT 9

**Redacted Version of
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to be Sealed**

Geoffrey Grundy

From: Mark C. Mao <m Mao@BSFLLP.com>
Sent: Wednesday, December 15, 2021 5:09 PM
To: Timothy Schmidt; QE Brown; googleteam@lists.susmangodfrey.com
Cc: Douglas Brush
Subject: RE: Brown v. Google LLC (N.D. Cal. Case No. 20-cv-03664) - Confidential

[EXTERNAL EMAIL from m Mao@bsfllp.com]

Counsel,

Thank you for the conference today.

First, we appreciate your willingness to provide information about the cafe.adinteractionlog that Google used as part of its mid-2020 Incognito detection analyses. Can you also please confirm that Google will identify all other log sources that Google used for these analysis, including the other “log sources” that Bert Leung was alluding to in this document: GOOG-CABR-05280756. In addition, the other two sources that Plaintiffs now request information about are:

- [REDACTED] in [REDACTED] containing the PPID to Biscotti mapping table. See GOOG-CABR-04430332 (“When we receive the PPID, we use [REDACTED] key to find the mapped Biscotti id, or create a new one if no mapping exists, in the [REDACTED] table.”).
- [REDACTED]. See GOOG-CABR-03823750 ([REDACTED]).

Second, we request that you specify which logs Google identified, are used for both display and search ads. For such logs, we would like to know if the fields for the search side have been removed.

Third, we are asking for descriptions for the following six types of fields:

- IP addresses (e.g., [REDACTED], [REDACTED], [REDACTED], [REDACTED], [REDACTED], [REDACTED], [REDACTED], and [REDACTED]) – the description should include at minimum who the IP addresses belong to (e.g., is this the IP address of the end user or Google’s server-side IP address);
- HTTP headers – the description should include at minimum whether the X-Client-Data Header (whether in whole or in part) is included or part of the stored header;
- User agent strings – the description should include at minimum whether the string is in part or in full;
- Identifier fields (e.g. IDs and cookies) – the description should include at minimum what kind of identifiers are stored, so that plaintiffs would know what kind of identifiers can be used to search against the source;
- Time-related data fields (e.g. [REDACTED], [REDACTED], [REDACTED], [REDACTED], and [REDACTED]) – the description should include at minimum what the time stamp is for;
- Fields containing URLs – the description should include at minimum what portions of the page URL is stored.

We thank you in advance.

From: Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Sent: Wednesday, December 15, 2021 12:46 PM
To: Mark C. Mao <m Mao@BSFLLP.com>; QE Brown <qebrown@quinnemanuel.com>;
googleteam@lists.susmangodfrey.com

Cc: Douglas Brush <douglas.brush@accelconsulting.llc>

Subject: Re: Brown v. Google LLC (N.D. Cal. Case No. 20-cv-03664) - Confidential

CAUTION: External email. Please do not respond to or click on links/attachments unless you recognize the sender.

Mr. Mao,

Absolutely I will set him up. If there are others from your team who would wish for access, please ping me and I will be happy to oblige.

Thank you,
Tim Schmidt

Timothy Schmidt

Consultant

M 202.577.5302

E timothy.schmidt@accelconsulting.llc

Accel Consulting LLC

BOULDER, CO 80301

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From: "Mark C. Mao" <mmao@BSFLLP.com>

Date: Wednesday, December 15, 2021 at 3:44 PM

To: Timothy Schmidt <timothy.schmidt@accelconsulting.llc>, QE Brown <gebrown@quinnemanuel.com>, "googleteam@lists.susmangodfrey.com" <googleteam@lists.susmangodfrey.com>

Cc: Douglas Brush <douglas.brush@accelconsulting.llc>

Subject: RE: Brown v. Google LLC (N.D. Cal. Case No. 20-cv-03664) - Confidential

Mr. Schmidt – I have a small administrative request. Going forward, can you also add Mr. Frawley to your fileshare? (Alex Frawley <AFrawley@susmangodfrey.com>) Thank you very much in advance, and I am indebted for the trouble.

From: owner-googleteam@lists.susmangodfrey.com <owner-googleteam@lists.susmangodfrey.com> **On Behalf Of** Timothy Schmidt

Sent: Wednesday, December 15, 2021 12:34 PM

To: QE Brown <gebrown@quinnemanuel.com>; googleteam@lists.susmangodfrey.com

Cc: Douglas Brush <douglas.brush@accelconsulting.llc>

Subject: Brown v. Google LLC (N.D. Cal. Case No. 20-cv-03664) - Confidential

Ms. Truong, Mr. Ansorge,

We have uploaded the data source list, search term criteria, and search terms for the first round of searches for Exhibit one for Brown, et. al. v. Google to our ShareFile system. You will find the information in the Brown v. Google\To Google\20211215 folder in a file named: "Brown v. Google LLC (N.D. Cal. Case No. 20-cv-03664) – Confidential.xlsx". The searches are to follow "OR" logic for the terms listed for each data source. Please kick off searches and provide results prior to COB EST, Monday, December 20, 2021.

For the Plaintiffs, we have placed the information file in the following location on your instance of our ShareFile system: Brown v. Google\To Brown\20211215 in a file of the same name as the one provided to Google.

Thank you,
Tim Schmidt

Timothy Schmidt

Consultant

M 202.577.5302

E timothy.schmidt@accelconsulting.llc

Accel Consulting LLC

BOULDER, CO 80301

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EXHIBIT 10

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1300 I Street NW, Suite 900, Washington, District of Columbia 20005-3314 | TEL (202) 538-8000 FAX (202) 538-8100

WRITER'S EMAIL ADDRESS
josefansorge@quinnemanuel.com

December 15, 2021

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VIA E-MAIL

Special Master Douglas Brush
(douglas.brush@accelconsulting.llc)
Accel Consulting, LLC

Timothy Schmidt
(timothy.schmidt@accelconsulting.llc)
Accel Consulting, LLC

Re: Google's Submissions in Response to November 12 Order Adopting in Part and
Modifying in Part the Special Master's Report and Orders on Referred Discovery Issues
Dkt. 377, Calhoun v. Google LLC, Case No. 5:20-cv-05146-LHK-SVK (N.D. Cal.) and
Dkt. 331, Brown v. Google LLC, Case No. 5:20-cv-03664-LHK-SVK (N.D. Cal.)

Dear Special Master Brush, Mr. Schmidt:

Google is hereby providing additional information requested during today's discovery process
status updates in *Brown v. Google* and *Calhoun v. Google*.

Brown v. Google

In response to Plaintiffs' request made today for additional information related to
[REDACTED], Google has used its [REDACTED] tool to compile the top 100 fields by size
for [REDACTED]. Google has loaded a spreadsheet [REDACTED] containing
those field names to the following sendfile:

<https://sendfile.quinnemanuel.com?p=9339ae52-65af-4ee1-9ae9-b6d0a16f0f33>

quinn emanuel urquhart & sullivan, llp

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STUTTGART | SYDNEY | TOKYO | WASHINGTON, DC | ZURICH

Separately, we are in receipt of the search terms Mr. Schmidt sent today for *Brown v. Google*. The search terms appear to contain new cookie values that are being provided for the first time in this litigation. Before Google searches for data associated with these cookies, we respectfully request confirmation that these new cookie values all come from the browsers of Plaintiffs who have provided a consent notification to Google authorizing it to search for and produce any associated data.

Calhoun v. Google

In response to Plaintiffs' and the Special Master's request made today for additional information related to [REDACTED], Google has identified the following responsive documents produced by Google in this matter.

- GOOG-CABR-03644400 - Chrome Metrics Keyed by GAIA ID
- GOOG-CABR-04735687 - [REDACTED] Data Ingestion from Chrome Sync
- GOOG-CABR-04476804 - [REDACTED] Definition of Internal Analysis
- GOOG-CABR-04476632 - [REDACTED] Access Best Practices
- GOOG-CABR-04702145 - [REDACTED] - Data Minimization Principles
- GOOG-CABR-04698271 - Obscured Tables in [REDACTED]
- GOOG-CALH-00031005 - Chrome_Data_in_[REDACTED] - Chrome_Analysis.pdf
- GOOG-CALH-00031010 - Chrome_Metrics_Keyed_by_Gaia_ID_-
from[REDACTED]_perspective
- GOOG-CALH-00031286 -
Chrome_in_[REDACTED]_DWH__Product__Platform_duality.docx
- GOOG-CALH-00547767 - [REDACTED] Devices
- GOOG-CABR-05326721 - [REDACTED] Access Best Practices

Google has loaded a zipfile ["GG8083RL_PDF Export_20211215.zip"] containing these documents to the following sendfile:

<https://sendfile.quinnemanuel.com?p=9339ae52-65af-4ee1-9ae9-b6d0a16f0f33>

In addition to these efforts, we are meeting with engineers to understand the options for, and burdens associated with, querying additional data in [REDACTED]. Please do not hesitate to contact us if you have any questions or require additional information.

Respectfully,

QUINN EMANUEL URQUHART & SULLIVAN, LLP



Josef Ansorge

EXHIBIT 11

**Redacted Version of
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Geoffrey Grundy

From: Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Sent: Tuesday, December 21, 2021 8:03 AM
To: Josef Ansorge; QE Brown
Cc: Mark C. Mao; googleteam@lists.susmangodfrey.com; Douglas Brush
Subject: Brown v. Google LLC (N.D. Cal. Case No. 20-cv-03664) - Confidential

[EXTERNAL EMAIL from timothy.schmidt@accelconsulting.llc]

Mr. Ansorge, et. al.,

Special Master Brush has approved the inclusion of [REDACTED] as a potentially relevant data source for which Brown Plaintiffs may request searches be performed. This decision is primarily based on Google providing additional information concerning that data source only around Thanksgiving and testimony provided in the recent deposition of Mr. Liao. Additionally, Brown Plaintiffs may search this data source in addition to the [REDACTED] data sources indicated in Exhibit 1 under the terms of Section 4, number 5. Seeing that Google has provided field names for this data source, the Special Master has asked the Brown Plaintiffs to provide search terms for [REDACTED] within two days (COB EST, December 23, 2021).

Thank you,
Tim Schmidt

Timothy Schmidt
Consultant
M 202.577.5302
E timothy.schmidt@accelconsulting.llc

Accel Consulting LLC
BOULDER, CO 80301

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EXHIBIT 12

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Ryan J. McGee
Attorney
rmcgee@forthepeople.com
Direct: (813) 223-0931

March 4, 2022

HIGHLY CONFIDENTIAL – SPECIAL MASTER AND ATTORNEYS’ EYES ONLY

Via Email

Mr. Josef Ansorge
JosefAnsorge@quinnemanuel.com
Quinn Emanuel

Special Master Douglas Brush
Douglas.Brush@accelconsulting.llc
Accel Consulting, LLC

Mr. Timothy Schmidt
Timothy.Schmidt@accelconsulting.llc
Accel Consulting, LLC

Re: *Brown v. Google LLC*, No. 5:20-cv-03664-YGR-SVK (N.D. Cal.)
Follow Up to March 4, 2022 Live Searches

Dear Special Master Brush,

Thank you for facilitating the 30 minutes of real-time searches conducted today. The *Brown* Plaintiffs write to propose a schedule for next steps and, by this letter, invite Google to prepare a joint update for the Special Master.

First, from demonstrations today, we ask that Google complete searches of the [REDACTED] logs ([REDACTED]; [REDACTED]; and [REDACTED]) using the [REDACTED] PPID-mapped-Biscottis ([REDACTED], [REDACTED], [REDACTED]) provided during the demo and provide a full output of the results, query, and any debugging output associated with the query, including for the PPID search.

Google’s Response:

Pursuant to Special Master Brush’s request during yesterday’s conference, Google has produced all the results for the live [REDACTED] log searches conducted yesterday. See Google’s March 4 submission titled “2022-03-04 Brown v. Google - Live [REDACTED] Queries.”

Second, during the *Calhoun* live search of the Chrome Sync log, an output associated with the bit “is_chrome_non_incognito_mode” was observed. Mr. Ansorge stated he was not familiar

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with this bit. The *Brown* Plaintiffs request that Google immediately provide information regarding this bit, including its purpose, the values for this bit, how those values are assigned, how those values are used, and under what circumstances those values are logged.

Google's Response:

The "is_chrome_non_incognito_mode" field appears in at least 17 files of Plaintiff data Google has produced, including:

GOOG-BRWN-00840713
 GOOG-BRWN-00840714
 GOOG-BRWN-00840715
 GOOG-BRWN-00845762
 GOOG-BRWN-00845763
 GOOG-BRWN-00845764
 GOOG-BRWN-00845765
 GOOG-BRWN-00845766
 GOOG-BRWN-00845767
 GOOG-BRWN-00845768
 GOOG-BRWN-00845769
 GOOG-BRWN-00845770
 GOOG-BRWN-00845771
 GOOG-BRWN-00845772
 GOOG-BRWN-00845773
 GOOG-BRWN-00845774
 GOOG-BRWN-00845776

Below is the proto comment for this field:

// True if the event originates from Chrome in non-Incognito mode.
 // See go/chrome-incognito-logging-for-location for more details.

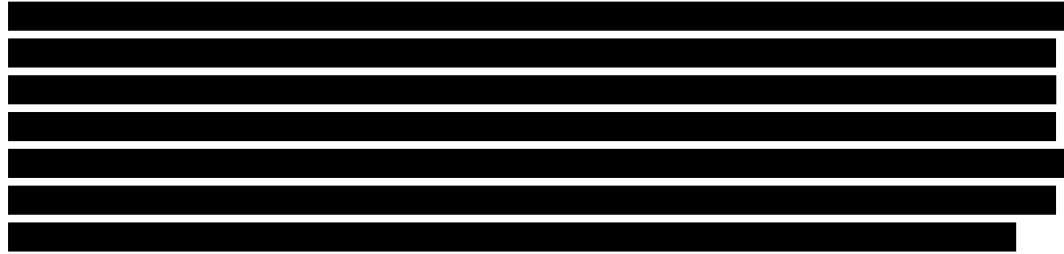
The hyperlink of go/chrome-incognito-logging-for-location links to GOOG-BRWN-00536949, which was produced to Plaintiffs in September 2021.

Third, the following (non-exhaustive) requests remain outstanding:

1. During the March 2d call, Mr. Schumann identified that the selection for Chrome UMA upload is controlled by a Finch variation. That same day we submitted variation IDs and asked Google to identify which variation ID corresponds to selection for Chrome UMA upload. We have also asked Google to confirm that UMA data is deleted on the browser side after UMA data is uploaded to Google, as well as a confirmation whether there is a variation ID below included within the X-Client-Data header indicating whether the Chrome instance has been selected for UMA upload:



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Google's Response:

This request is outside the scope of Special Master's order and request. Google will not respond to these additional discovery requests unless the Special Master orders us to do so.

2. The *Brown* Plaintiffs request again schema files for the [REDACTED] logs containing the Incognito bit as well as upstream logs and sources. The *Brown* Plaintiffs also request again the full schema files for all of the identified logs in the Special Master process. Google engineers have indicated that all data schemas are within proto files. Our understanding is that the *Calhoun* team received in writing much more schema than the *Brown* Plaintiffs, in addition to a fuller explanation. We request a similar explanation for the logs that we have requested to be searched in the Second Iterative Search.

Google's Response:

First, Google produced the top 100 fields by size for the [REDACTED] logs from which the [REDACTED] pulls data. Google is engaging in best efforts to search all the identifiers provided by consenting Plaintiffs and their experts across the [REDACTED] logs. However, all [REDACTED] logs contain third party confidential publisher information and Google will not be able to produce search results until after all third party publishers have had reasonable notice.

Following up on Mr. Mao's practical suggestion, Google proposes to produce one record for each log with the values redacted, so that Plaintiffs will have the populated fields for each log. Google will produce the records no later than Thursday, March 10, 2022.

Second, pursuant to the Special Master's order and instructions, Google will not be providing *all* fields for *all* identified logs. See Mr. Schmidt's December 10, 2021 email ("the Special Master temporarily modified the field listing requirement to include the lesser of 100 fields or all of the fields in each data source.").

The technical burdens associated with providing *all* field names are neither proportional nor beneficial to efficiently resolving the disputes currently before the Special Master. As Google explained in its October 1 letter re: technical burden to the Special Master, Google stores its logs records in protocol buffers. Protocol buffers related to the selected log sources are complex and include nested sub-messages that consist of other protocol buffers, that contain further nested sub-messages, and so forth. Each message file contains information about the name, type, identifying field number, and (in some cases) a comment



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about the field. To save space on disk, a protocol buffer record is encoded in a format in which the fields are identified by tag numbers.

Because the logs in question have fields and message files from multiple protocol buffer files, Google cannot produce a single “.proto” file, but rather would be required to compile a list of hundreds of files—a complex exercise that will require many software engineering hours. Similar to how C++ compilers can walk through #include statements to produce a binary with all the relevant code and libraries linked in—but there are no readily available tools to reconstruct all the relevant source code that went into that specific binary—proto files import other proto files, using subsections of those files. Moreover, proto files related to the selected data sources are source code: they are submitted as source code, reviewed as source code, and run as source code.




A protocol buffer contains all possible tags that could contain data. With very few exceptions—such as the limited number fields that have the rarely used “required” tag—there is no requirement for any given field to be filled in. Moreover, it is impossible to enforce the semantics of what a field is used for from product to product, or even record to record. Some protocol buffers, such as those used in ad query logs or frontend logs, are shared across multiple Google products and the vast majority of fields listed therein will contain no data in a given record. For example, many fields pertain only to ads shown on Google’s search page and are irrelevant to ads on third-party websites.

Providing a list of fields in a proto that are actually filled/used for the data at issue, is also burdensome. Google has no existing tool that provides a listing of populated fields based on a given set of conditions. In theory, Google engineers could create a Flume pipeline to parse each individual record, filter-in matching product/criteria, enumerate the filled fields, and add those to a running set. However, this is a non-trivial program to write, test, submit, and validate. Running this program over more than a handful of recent days would also require significant computer resources, as the potentially relevant log sources are in the [REDACTED] range. This list of fields would also contain highly sensitive information related to Google’s ads serving infrastructure and abuse detection, that is irrelevant to this matter and whose disclosure could cause Google substantial economic harm.

Third, as explained at multiple Special Master conferences, Google did not provide “much more schema” to the *Calhoun* Plaintiffs. As the Special Master knows, with regard to schema/ field names, Google provided to both *Brown* and *Calhoun* Plaintiffs: (1) the top 100 fields by size; and (2) search results that contain populated fields.

3. The *Brown* Plaintiffs request again any Plaintiffs’ preserved data that Special Master Brush has ordered Google to produce. In addition, we request that the *Brown* Plaintiffs receive the same schema and explanation for Plaintiffs’ data as similarly provided to the *Calhoun* team. Furthermore, we request the decryption keys for any identifiers contained within the preserved data to the extent that these identifiers require decryption.

Google’s Response:

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Plaintiffs requested the production of preserved data for the first time earlier this week. Google will be producing the preserved data from [REDACTED] logs that do not contain confidential third party information no later than Thursday, March 10.

4. Google engineers have agreed to take a look at our log requests in the Second Iterative Search and let us know which parameters would not return data for each log—to expedite search process. We have requested multiple times for that to be conducted immediately, and have not received a response.

Google's Response:

Google has previously agreed to provide this information along with the search results. But in the interest of cooperation and timely conclusion, below is a table that indicates whether each data source selected by Plaintiffs is queryable by the ID types Plaintiffs requested to run:

Selected Data Sources	Whether Queryable by Requested ID Types
[REDACTED]	1. UMA client ID (client_ID2) - Yes, search results produced 2. IP address and User Agent - Google is still investigating
[REDACTED] (variant of [REDACTED])	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - No
[REDACTED]	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No

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██████████	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No
██████████	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No
██████████████████ ██████████ ██████████████████	1. Analytics CID - Yes 2. Analytics User-ID (UID) - Google is still investigating 3. IP address and User Agent - Google is still investigating 4. Biscotti ID extracted from IDE cookies - Yes 5. Zwieback ID extracted from NID cookies - No 6. PPID-mapped-biscotti ID from PPID - Yes
██████████	1. Analytics CID - Yes 2. Analytics User-ID (UID) - Google is still investigating 3. IP address and User Agent - Google is still investigating 4. Biscotti ID extracted from IDE cookies - Yes 5. Zwieback ID extracted from NID cookies - No 6. PPID-mapped-biscotti ID from PPID - Yes
UMA Dashboard Statistics	Aggregate statistics
User Identifiers in Link Decoration	1. URL Clickstring - Google is still investigating

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All logs that contain a "Maybe Chrome Incognito bit" or equivalent	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - Yes 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No
[REDACTED]	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No
[REDACTED]	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No
[REDACTED] [REDACTED]	1. Analytics CID - Yes 2. Analytics User-ID (UID) - Yes 3. IP address and User Agent - Google is still investigating 4. Biscotti ID extracted from IDE cookies - Yes 5. Zwieback ID extracted from NID cookies - No 6. PPID-mapped-biscotti ID from PPID - Yes
[REDACTED]	1. Analytics CID - Yes 2. Analytics User-ID (UID) - Yes 3. IP address and User Agent - Google is still investigating 4. Biscotti ID extracted from IDE cookies - Yes 5. Zwieback ID extracted from NID cookies - No 6. PPID-mapped-biscotti ID from PPID - Yes

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██████████	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No
██████████	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No
██████████	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No
██████████	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No
██████████	1. Biscotti ID extracted from IDE cookies - Yes 2. Zwieback ID extracted from NID cookies - No 3. PPID-mapped-biscotti ID from PPID - Yes 4. IP address and User Agent - Google is still investigating 5. Analytics CID - No 6. Analytics User-ID (UID) - No



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Basic Subscriber Information / Legal Investigations Support Custom Tooling	1. Google Accounts (GAIA IDs) - Yes
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5. The *Brown* Plaintiffs have repeatedly requested an explanation as to which logs contain PPID and Analytics User ID (i.e., this was part of our multiple requests previously for descriptions for the identifier fields).

Google's Response:

See response to Request 4 above. Google has no existing tool that provides a listing of populated fields that indicate whether a given log contains PPID or Analytics User ID.

6. The *Brown* Plaintiffs have repeatedly requested an explanation as to which *Brown* Plaintiff user identifiers have been decrypted and when results from the Second Iterative Search will be produced.

Google's Response:

All the identifiers provided by consenting Plaintiffs and their experts on December 17, February 22, and March 2 have been decrypted to the extent necessary. Google has produced all the decrypted IDs to Plaintiffs. Google will provide results from the second iterative search that do not contain third-party confidential information no later than Monday, March 14.

Respectfully,

Ryan J. McGee

Ryan J. McGee

EXHIBIT 15

**Redacted Version of
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Geoffrey Grundy

From: Douglas Brush <douglas.brush@accelconsulting.llc>
Sent: Tuesday, March 22, 2022 3:24 PM
To: Timothy Schmidt; Mark C. Mao; Andrew Schapiro; Tracy Gao;
GOOGLETEAM@lists.susmangodfrey.com
Cc: QE Brown
Subject: Re: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan
Importance: High

[EXTERNAL EMAIL from douglas.brush@accelconsulting.llc]

Counsel, et al.,

Thank you for making the time to speak tomorrow.

We are far past the end of discovery and these calls are to serve as instructions for closing out the only two open issues:

1. Final searches – What terms and data sources will be run on the final searches of data.
2. Closing out the preservation plan. Please follow Mr. Schmidt's instructions on this. We will not spend much time on arguments or review of this issue tomorrow. However, I do expect the fully baked plans to come to me so I can finalize, send back, and have it filed with the Court.

To be crystal clear: This is the end of the process. We will not be arguing new issues or expanding discovery. Be prepared to come discuss how we close out the Special Master process this week.

Best,

Doug

Douglas Brush

President

M 917.470.9140

E douglas.brush@accelconsulting.llc

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From: Timothy Schmidt <timothy.schmidt@accelconsulting.llc>

Date: Tuesday, March 22, 2022 at 6:22 AM

To: Mark C. Mao <mmap@BSFLLP.com>, Andrew Schapiro <andrewschapiro@quinnemanuel.com>, Douglas Brush <douglas.brush@accelconsulting.llc>, Tracy Gao <tracygao@quinnemanuel.com>, GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>

Cc: QE Brown <qebrown@quinnemanuel.com>

Subject: Re: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

Ms. Gao,

Please set the meets for 10:00 am and 11:30 am EDT. Each meet should be for 1 hour.

Thank you,

Tim Schmidt

Timothy Schmidt

Consultant

M 202.577.5302

E timothy.schmidt@accelconsulting.llc

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From: Timothy Schmidt <timothy.schmidt@accelconsulting.llc>

Sent: Monday, March 21, 2022 11:08:41 PM

To: Mark C. Mao <mmao@BSFLLP.com>; Andrew Schapiro <andrewschapiro@quinnemanuel.com>; Douglas Brush <douglas.brush@accelconsulting.llc>; Tracy Gao <tracygao@quinnemanuel.com>;
GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>

Cc: QE Brown <qebrown@quinnemanuel.com>

Subject: Re: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

All,

Thank you for providing your versions of a preservation plan as requested. Special Master and I have reviewed the plans and while these will serve as a starting point, we will need for the parties to provide a version that allows for consolidation of all parts of the competing plans into a unified format.

Special Master Brush requires that you provide a joint plan in a consolidated tabular format (i.e., both parties will provide input into the same cell within the table for each issue). The unified tabular joint submission will be provided to Special Master Brush by no later than close of business EDT, tomorrow, March 22, 2022. The format of each party's contribution will be as follows:

- Agreed upon verbiage will be provided in Black.
- Google verbiage to which Plaintiff does not agree will be provided in Orange.
- Plaintiff verbiage to which Google does not agree will be provided in Blue.

The table will be comprised of five columns:

1. Issue
2. Description of Issue and list of relevant data source(s)
3. For each identified data source associated with this issue, standard preservation length and approximate size
4. Start and End dates of preservation for relevant data sources for this issue
5. For each identified data source associated with this issue, a list of fields (where known or a description of content in general) which will be preserved; sampling methodology (if any)

Both Parties will refrain from providing legal arguments and/or criticism of opposing Party's approach.

The goal is to create a framework for Special Master Brush to work from to finalize a binding preservation plan.

Thank you,

Tim Schmidt

Timothy Schmidt

Consultant

M 202.577.5302

E timothy.schmidt@accelconsulting.llc

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From: Mark C. Mao <mcao@BSFLLP.com>

Date: Saturday, March 19, 2022 at 9:19 PM

To: Andrew Schapiro <andrewschapiro@quinnemanuel.com>, Douglas Brush <douglas.brush@accelconsulting.llc>, Tracy Gao <tracygao@quinnemanuel.com>, Timothy Schmidt <timothy.schmidt@accelconsulting.llc>, GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>

Cc: QE Brown <qebrown@quinnemanuel.com>

Subject: Re: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

Mr. Shapiro -

Please present an actual preservation plan that includes data from the Class Period. That is what the Court ordered.

Your proposal has no basis or precedence in case law.

Thanks.

Mark (Hsiao C) Mao
Boies Schiller Flexner LLP
mcao@bsfllp.com
415.999.9695 (Cell)

From: Andrew Schapiro <andrewschapiro@quinnemanuel.com>

Sent: Saturday, March 19, 2022 11:53:41 AM

To: Mark C. Mao <mcao@BSFLLP.com>; Douglas Brush <douglas.brush@accelconsulting.llc>; Tracy Gao <tracygao@quinnemanuel.com>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>

Cc: QE Brown <qebrown@quinnemanuel.com>

Subject: RE: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

Dear Special Master Brush:

This is a discussion about preservation, not about the merits of a class certification or liability. It is, of course, neither feasible nor reasonable to demand preservation of everything Plaintiffs list in the preservation proposal. Nor is it necessary. The case will rise or fall regardless of the amount of data that is preserved. Stated otherwise, the amount and quality of data that Google proposes preserving is more than sufficient for Plaintiffs to attempt to make their case and us to attack it.

I'm sure the last thing you are interested in now is finger-pointing, so I will say only that it was always our desire to submit a joint document, even if it reflected (via the color-code method) significant disagreement among the parties. The emails appended to Ms. Gao's submission make that clear. When, last night, plaintiffs refused to do so and sent in their own proposal, we had no choice but to follow with our own. The suggestion that our proposal is not a "preservation" proposal because it would preserve only samples from the logs— which is the only feasible approach, given the volume of data at issue — is meritless. If it helps, we would be willing to stipulate that the preserved samples are, in our view, representative ones.

Other than that, Mr. Mao's invitation to draw you in to a legal dispute about how claims in a class action can or cannot be established should be rejected. The issue before the Special Master, technical in nature, is whether a workable plan can be devised. The plan we have proposed is the only one that fits that bill, and should be adopted.

From: Mark C. Mao <mmao@BSFLLP.com>

Sent: Saturday, March 19, 2022 10:57 AM

To: Douglas Brush <douglas.brush@accelconsulting.llc>; Tracy Gao <tracygao@quinnemanuel.com>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; GOOGLETEAM@lists.susmangodfrey.com

Cc: QE Brown <qebrown@quinnemanuel.com>

Subject: RE: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

[EXTERNAL EMAIL from mmao@bsfllp.com]

Special Master Brush:

It may help if I summarize at a high level, what the parties appear to be able to agree on (or work further to), and disagree on:

Both Google and Plaintiffs appear to be able to work further to:

- Select what fields and tables need to be preserved, to help reduce the total size of data to be preserved (e.g., Plaintiffs' proposed parameters below);
- Select what types of log sources are at issue (although Plaintiffs are still waiting for Google's full list of relevant logs and schema);
- Whether "super logs" combining log sources and data may be used by Google (e.g., combining UMA logs with ad logs).

However, Plaintiffs and Google are not able to agree on whether a sampling plan may be used in lieu of full preservation. To be clear, Google is talking about only preserving a small set of random event level data (e.g., at the row level), but destroying the remainder. Plaintiffs have asked for research from Google proving that this is legally permissible, because Plaintiffs have found no authority for the allowance of such destruction.

Google's insistence on a sampling approach is a gateway issue on the remainder of the agreement for Google. Thus, Plaintiffs have not yet been able to discuss with Google the preservation of other types of data typically preserved by Google, but of which should make it into a preservation plan anyways:

- Encryption keys;

- Profile data;
- Dashboard data;
- Financial data.

This high-level summary contains some over-simplification. But I figure this may be the easiest way to explain to you why the parties are at an impasse.

Still, I hope I made clear that I am open to hearing more from Google over the weekend and before our meeting on the 22nd, and I remain on standby. Thank you all in advance.

From: Douglas Brush <douglas.brush@accelconsulting.llc>

Sent: Saturday, March 19, 2022 7:46 AM

To: Mark C. Mao <mmao@BSFLLP.com>; Tracy Gao <tracygao@quinnemanuel.com>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; GOOGLETEAM@lists.susmangodfrey.com

Cc: QE Brown <gebrown@quinnemanuel.com>

Subject: Re: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

CAUTION: External email. Please do not respond to or click on links/attachments unless you recognize the sender.

Where is the joint plan?

Best,

Doug

Douglas Brush

President

M 917.470.9140

E douglas.brush@accelconsulting.llc

Accel Consulting LLC

BOULDER, CO 80301

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From: Mark C. Mao <mmao@BSFLLP.com>

Date: Saturday, March 19, 2022 at 4:41 AM

To: Tracy Gao <tracygao@quinnemanuel.com>, Douglas Brush <douglas.brush@accelconsulting.llc>, Timothy Schmidt <timothy.schmidt@accelconsulting.llc>, GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>

Cc: QE Brown <gebrown@quinnemanuel.com>

Subject: Re: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

Ms. Gao -

The record below shows that the Brown plaintiffs were the only ones that had actually presented a preservation plan. Your counter presented a sampling plan instead, not a preservation plan.

While interesting theoretically, we immediately told you that it seemed legally questionable whether a sampling plan can even be used and approved by a Court in lieu, especially before class certification. Here, you are not even suggesting the seeking of Court approval, or some other means of blessing by the class process. Thus, we asked that you research the topic, and you do not appear to have done so.

Our plan presented last night is what we had originally presented on March 9, which remains the only preservation plan presented. Again, we ask that if your only suggestion is a sampling plan, please present legal authority that shows sampling may be used in lieu of actual preservation.

Thank you,

Mark (Hsiao C) Mao
Boies Schiller Flexner LLP
mmao@bsfllp.com
415.999.9695 (Cell)

From: Tracy Gao <tracygao@quinnemanuel.com>
Sent: Friday, March 18, 2022 8:28 PM
To: Douglas Brush <douglas.brush@accelconsulting.llc>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>; Mark C. Mao <mmao@BSFLLP.com>
Cc: QE Brown <gebrown@quinnemanuel.com>
Subject: FW: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

Dear Special Master Brush, Mr. Schmidt,

As counsel for Plaintiffs suggested below, we are submitting Google's preservation proposal (see attached). We sent this proposal to Plaintiffs on Tuesday, March 15. The parties met and conferred on the same day, and counsel for Plaintiffs indicated that they would let us know which aspects of the proposal they could agree to and propose a joint preservation plan. We followed up with Plaintiffs a couple of times today, but unfortunately Plaintiffs refused to submit a joint preservation proposal. Instead, they sent a new proposal to the Special Master.

We are reviewing Plaintiffs' new proposal. Meanwhile, we can meet with the Special Master team at any time to discuss the details in our proposal.

Best,
Tracy

From: Mark C. Mao <mmao@BSFLLP.com>
Sent: Friday, March 18, 2022 9:20 PM
To: Tracy Gao <tracygao@quinnemanuel.com>; Ryan McGee x3030 <rmcgee@forthepeople.com>; Beko Richardson <brichardson@BSFLLP.com>; GOOGLETEAM@lists.susmangodfrey.com
Cc: QE Brown <gebrown@quinnemanuel.com>
Subject: RE: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

[EXTERNAL EMAIL from mmao@bsfllp.com]

Counsel:

That won't work for many reasons. We will provide a response, to you and the Special Master. But you should probably do the legal research necessary on your proposal.

Please send your proposal and research to the Special Master as well. Thank you.

From: Tracy Gao <tracygao@quinnemanuel.com>

Sent: Friday, March 18, 2022 6:02 PM

To: Mark C. Mao <mmao@BSFLLP.com>; Ryan McGee x3030 <rmcgee@forthepeople.com>; Beko Richardson <brichardson@BSFLLP.com>; GOOGLETEAM@lists.susmangodfrey.com

Cc: QE Brown <gebrown@quinnemanuel.com>

Subject: RE: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

Counsel,

Please find attached Google's draft of the joint preservation proposal. Please let us know if Plaintiffs agree to any specific aspects of the proposal. We propose to jointly submit to the Special Master the preservation proposal with areas of agreement in black, and disputed positions in red (Plaintiffs)/ blue (Google).

Best,
Tracy

From: Mark C. Mao <mmao@BSFLLP.com>

Sent: Friday, March 18, 2022 3:57 PM

To: Tracy Gao <tracygao@quinnemanuel.com>; Ryan McGee x3030 <rmcgee@forthepeople.com>; Beko Richardson <brichardson@BSFLLP.com>; GOOGLETEAM@lists.susmangodfrey.com

Cc: QE Brown <gebrown@quinnemanuel.com>

Subject: RE: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

[EXTERNAL EMAIL from mmao@bsfllp.com]

I will send our proposal sometime between 3-4pm PT ideally. Thanks.

From: Tracy Gao <tracygao@quinnemanuel.com>

Sent: Friday, March 18, 2022 10:28 AM

To: Mark C. Mao <mmao@BSFLLP.com>; Ryan McGee x3030 <rmcgee@forthepeople.com>; Beko Richardson <brichardson@BSFLLP.com>; GOOGLETEAM@lists.susmangodfrey.com

Cc: QE Brown <gebrown@quinnemanuel.com>

Subject: FW: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

Counsel,

As discussed at Tuesday's meet and confer, we are expecting Plaintiffs' proposed stipulation or thoughts on our March 15 suggested framework for preservation. Are Plaintiffs intending to provide any further input on the joint preservation proposal? To the extent that Plaintiffs can agree to specific aspects of our preservation proposal, could you please let us know by 1 pm Pacific? Thank you.

Best,
Tracy

From: Josef Ansorge <josefansorge@quinnemanuel.com>
Sent: Tuesday, March 15, 2022 12:55 PM
To: Mark C. Mao <mmao@BSFLLP.com>; Douglas Brush <douglas.brush@accelconsulting.llc>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Cc: QE Brown <gebrown@quinnemanuel.com>; GOOGLETEAM@lists.susmangodfrey.com
Subject: RE: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

Dear Mr. Mao,

Thank you for the productive meet and confer yesterday. Below please find our written proposal / suggested framework for preservation.

15-MAR-2022 Draft Google Framework for Preservation

Google proposes to preserve a daily sample of [REDACTED] Display Ads events associated with [REDACTED] different randomly selected UIDs scoped to activity in the United States based on the Country field:

Event_id (information used to identify events in log entries);

IP address;

User-agent;

HTTP header (including x-client-data header field);

URL; and

Date and time (to the extent that is not legible from Event_id).

Instead of categorically preserving a number of different log sources, Google proposes to construct a log source for preservation that only consists of the specific fields and data to be preserved. In addition, Google proposes preserving:

the [REDACTED] dashboard data (based on **is_chrome_non_incognito** and **is_chrome_incognito** boolean fields); and

the Display Ads dashboard data (based on **maybe_chrome_incognito** boolean field).

We are optimistic that the parties can find agreement and look forward to discussing class-wide preservation with you in more detail during today's meet and confer.

Best,

Josef Ansorge
Of Counsel,
Quinn Emanuel Urquhart & Sullivan, LLP

1300 I Street, NW, Suite 900
Washington, D.C. 20005
202-538-8267 Direct
202.538.8000 Main Office Number
202.538.8100 FAX

josefansorge@quinnemanuel.com
www.quinnemanuel.com

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From: Mark C. Mao <mmao@BSFLLP.com>
Sent: Wednesday, March 9, 2022 5:06 PM
To: Douglas Brush <douglas.brush@accelconsulting.llc>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Cc: QE Brown <gebrown@quinnemanuel.com>; GOOGLETEAM@lists.susmangodfrey.com
Subject: Brown (20-3664) v. Google - Plaintiffs' Proposed Preservation Plan

[EXTERNAL EMAIL from mmao@bsfllp.com]

Dear Special Master Brush,

As you have requested, Plaintiffs propose the following to try to move the ball forward on a preservation plan, consistent with the Magistrate Judge's recent orders.

Google to Preserve:

Plaintiffs propose that Google extend its default retention period for three discrete categories of logs, as well as any encryption and/or joinability keys associated with any identifiers in such logs, as follows:

1. UMA Raw Logs: Google should preserve raw UMA logs through the duration of this case. Please note that this log appears to be [REDACTED] See GOOG-CABR-04801490.
1. [REDACTED] Logs with the "Maybe Incognito" Bit: Google should preserve all of these logs for at least [REDACTED] year longer than the default retention period. Please note that Google considered retaining [REDACTED] logs—which include substantially greater data and are costlier to preserve than [REDACTED] logs—for up to [REDACTED] year for its own, internal business purposes. See GOOG-BRWN-00845467.
1. Select Additional Logs: Google should preserve the following logs, which appear to contain either (a) the X-Client data header or (b) PPID-mapped biscotti and/or Analytics User IDs, for at least [REDACTED] year longer than the default retention period: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; and [REDACTED].

For sources Nos. 2-3, the proposed retention periods may be sufficient, or would provide sufficient time for the parties to agree on a more targeted preservation plan if necessary. Plaintiffs remain willing to consider any proposals by Google to narrow what is preserved to less than the full content of these logs, but Plaintiffs presently do not have sufficient information to propose such a subset without further input from Google and believe the full logs should be preserved at least long enough for the parties to confer about a more targeted preservation plan. For example, Plaintiffs may be willing to meet and confer to agree on the preservation of a smaller subset of the data, specifically – 1) identifiers, 2) IP address, 3) user-agent, 4) HTTP header, 5) URL, 6)

date and time, and 7) any “incognito”-titled field (e.g., “maybe_chrome_incognito”) or field containing Incognito-detection (e.g., [REDACTED] fields).

Google to Disclose:

Plaintiffs also propose that Google disclose the names of all logs in the following categories, as well as their default retention periods. Once such a disclosure is made, Plaintiffs can consider what preservation, if any, may be necessary.

1. All source logs from which the “maybe_incognito” bit in the [REDACTED] logs described above may be inferred.
1. All logs containing any parameter or field with “Incognito” in the name, and the full name/description of the field with “Incognito” in the name for each such log. (For instance, [REDACTED] logs that contain an “is_chrome_non_incognito” bit would be included here.)
1. All logs containing PPID-mapped biscotti and/or Analytics User IDs. Google has indicated that it does not have an “existing tool” that “provides a listing of populated fields that indicate whether a given log contains PPID or Analytics User ID.”

For these three categories of logs and sources that Plaintiffs are requesting that Google disclose, Plaintiffs may again be willing to meet and confer to agree on the preservation of a smaller subset of the data, specifically – 1) identifiers, 2) IP address, 3) user-agent, 4) HTTP header, 5) URL, 6) date and time, and 7) any “incognito”-titled field (e.g., “maybe_chrome_incognito”) or field containing Incognito-detection (e.g., [REDACTED] fields). Plaintiffs respectfully submit that Google should use whatever means it has available to attempt in good faith to identify such logs; for example, by (1) asking persons likely to have such knowledge, (2) running test searches for such identifiers across a broader set of logs to identify those containing such identifiers, (3) using any tools that would identify such logs (even if such a tool would not “provide a listing of populated fields” as Google’s carefully-worded statement above suggests), or (4) any other methods available to Google.

Plaintiffs and their experts remain available to discuss these issues to try to arrive at a sensible preservation framework.

Respectfully,

Mark C. Mao

(He/him/his)

Partner

BOIES SCHILLER FLEXNER LLP

44 Montgomery Street, 41st Floor

San Francisco, CA 94104

(t) 415 293 6858

(c) 415 999 9695

mmao@bsflp.com

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error, please immediately notify the sender by replying to this electronic message and then deleting this electronic message from your computer. [v.1 08201831BSF]

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EXHIBIT 16

**Redacted Version of
Document Sought
to be Sealed**

Geoffrey Grundy

From: Josef Ansorge
Sent: Wednesday, March 23, 2022 11:47 AM
To: Douglas Brush; Timothy Schmidt; Mark C. Mao
Cc: QE Brown; GOOGLETEAM@lists.susmangodfrey.com
Subject: Brown v. Google: Deposition Testimony re: [REDACTED] Logs

Special Master Brush, Mr. Schmidt, Mr. Mao,

Thank you for the productive meet and confer this morning. As requested by the Special Master, we are hereby providing sendfile information for the deposition transcript and relevant exhibit used at Dr. Sadowski's 30(b)(6) deposition regarding the [REDACTED] logs (Notice 2; Topic 10). We have highlighted the most relevant passages for the **is_chrome_non_incognito** and **is_chrome_incognito** Boolean fields in both documents. (I will provide the sendfile password under separate cover.)

[Click here to download the file\(s\) listed below](#)

DrCaitlinSadowski_2_highlighting.pdf	122.04 KB
DrCaitlinSadowski_COND.pdf	425.28 KB

If the link above does not open, please copy and paste the following URL into your browser:
<https://sendfile.quinnemanuel.com/pkg?token=34268486-5ae9-487a-9d85-9dc72a253207>

As explained this morning, to the extent Plaintiffs select any of these [REDACTED] log sources for their next round of searches—and the Special Master approves the requests—Google agrees to conduct searches over those sources and produce responsive results.

We look forward to working with Plaintiffs and the Special Master to close out the Special Master process this week.

Best,

Josef Ansorge
Of Counsel,
Quinn Emanuel Urquhart & Sullivan, LLP

1300 I Street, NW, Suite 900
Washington, D.C. 20005
202-538-8267 Direct
202.538.8000 Main Office Number
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EXHIBIT 17

**Redacted Version of
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to be Sealed**

Geoffrey Grundy

From: Josef Ansorge
Sent: Saturday, March 26, 2022 8:59 AM
To: Douglas Brush; Ryan McGee x3030; Timothy Schmidt; Mark C. Mao
Cc: QE Brown; GOOGLETEAM@lists.susmangodfrey.com
Subject: Re: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

Special Master Brush,

Thank you for your email and guidance. Google is ready to initiate the final set of searches, including searches across the preserved data you referred to in your email. We look forward to receiving the final set of search requests from Plaintiffs and to working with Plaintiffs and the Special Master team to successfully close out the Special Master process.

Best,

Josef Ansorge
Of Counsel,
Quinn Emanuel Urquhart & Sullivan, LLP

1300 I Street, NW, Suite 900
Washington, D.C. 20005
202-538-8267 Direct
202.538.8000 Main Office Number
202.538.8100 FAX
josefansorge@quinnemanuel.com
www.quinnemanuel.com

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From: Douglas Brush <douglas.brush@accelconsulting.llc>
Sent: Saturday, March 26, 2022 11:35
To: Ryan McGee x3030 <rmcgee@forthepeople.com>; Josef Ansorge <josefansorge@quinnemanuel.com>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; Mark C. Mao <mcao@BSFLLP.com>
Cc: QE Brown <qebrown@quinnemanuel.com>; GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>
Subject: Re: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

[EXTERNAL EMAIL from douglas.brush@accelconsulting.llc]

Mr. McGee and Mr. Ansorge,

Where are we in the search negotiations and a proposed plan for final searches?

As for the “*Preserved*” data listed below, I am to assume this is the blanked data put on litigation hold, that has not been produced due to 3rd party notification issues.

This data needs to be searched in accordance with the Special Master process and order. This is the process I want followed and to end the dispute about its production.

Best,

Doug

Douglas Brush

President

M 917.470.9140

E douglas.brush@accelconsulting.llc

Accel Consulting LLC

BOULDER, CO 80301

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From: Ryan McGee x3030 <rmcgee@forthepeople.com>

Date: Thursday, March 24, 2022 at 8:30 PM

To: Josef Ansorge <josefansorge@quinnemanuel.com>, Douglas Brush <douglas.brush@accelconsulting.llc>, Timothy Schmidt <timothy.schmidt@accelconsulting.llc>, Mark C. Mao <mmao@BSFLLP.com>

Cc: QE Brown <qebrown@quinnemanuel.com>, GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>

Subject: Re: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

Special Master Brush, Mr. Schmidt, and Counsel:

Regarding the below “preserved data,” the *Brown* Plaintiffs think what would help the parties move onward is:

- A full production of all of Plaintiffs’ identifiers from the “preserved data,” for what was withheld below. If no identifiers were withheld, Google should so indicate.
- For the below that Google is withholding, the parties need a record of what exactly is being held back.
 - At minimum, Plaintiffs would be entitled to field descriptions. This way, if there is any future dispute, there is no disagreement as to what was withheld, and on what alleged basis.
 - Without descriptions, there is no record of what Google is currently claiming needs “publisher permission.” The Special Master and Court cannot evaluate the propriety of Google’s claim.

If Google is willing to agree to the proposed interim solution above, Plaintiffs can wait longer for the rest of their preserved data, while proceeding forward beyond the issue of “preserved data” at least for their searches. The *Brown* Plaintiffs maintain that they are entitled to all of their data, and a full production of the preserved data as ordered. The

Thank you,
Ryan

P: (813) 223-0931
F: (813) 222-4702
A: 201 N Franklin St, 7th Floor, Tampa, FL 33602



The page containing the content that was not loaded is not available.

From: <owner-googleteam@lists.susmangodfrey.com> on behalf of Josef Ansoerge
<josefansorge@quinnemanuel.com>
Date: Wednesday, March 23, 2022 at 4:34 PM
To: Douglas Brush <douglas.brush@accelconsulting.llc>, Timothy Schmidt
<timothy.schmidt@accelconsulting.llc>, "Mark C. Mao" <m Mao@BSFLLP.com>
Cc: QE Brown <qebrown@quinnemanuel.com>, "GOOGLETEAM@lists.susmangodfrey.com"
<GOOGLETEAM@lists.susmangodfrey.com>
Subject: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

As requested during this morning's meet and confer we have worked with Google engineers to pull additional descriptive statistics comparing produced preserved data to preserved data that would require reasonable publisher notice before it can be produced.

[illegible]

EXHIBIT 18

**Redacted Version of
Document Sought
to be Sealed**

Geoffrey Grundy

From: Douglas Brush <douglas.brush@accelconsulting.llc>
Sent: Thursday, March 31, 2022 10:56 AM
To: Josef Ansorge; Mark C. Mao; QE Brown
Cc: GOOGLETEAM@lists.susmangodfrey.com; Timothy Schmidt
Subject: Re: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

[EXTERNAL EMAIL from douglas.brush@accelconsulting.llc]

Messrs Ansorge and Mao,

Plaintiffs are to provide final searches at this point.

As for the *preserved-historical data*, the preponderance of this material has been produced to the Plaintiffs. This should give ample context to construct searches. What has **NOT** been produced is material that needs 3rd party consent.

This tranche of data (*preserved-historical data requiring 3rd party consent*) will be searched with terms provided by the Plaintiffs. Then, responsive data will need to have 3rd party notice before production to the Plaintiffs.

We do not need to complicate this any further.

If we need to hop on a call to resolve this, please advise.

Best,

Doug

Douglas Brush

President

M 917.470.9140

E douglas.brush@accelconsulting.llc

Accel Consulting LLC

BOULDER, CO 80301

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From: Josef Ansorge <josefansorge@quinnemanuel.com>

Date: Thursday, March 31, 2022 at 9:38 AM

To: Mark C. Mao <mmap@BSFLLP.com>, Douglas Brush <douglas.brush@accelconsulting.llc>, QE Brown <qebrown@quinnemanuel.com>

Cc: GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>, Timothy Schmidt

<timothy.schmidt@accelconsulting.llc>

Subject: RE: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

Dear Special Master Brush,

As far as historical searches, you clearly informed the parties how publisher notice is to be handled: "Preserved data sources are to be searched in accordance with the Special Master process and order." No further meet and confers should be required. That dispute is resolved.

For the avoidance of all doubt, Google is not refusing to complete any searches. To the contrary, Google has repeatedly requested Plaintiffs' third and final set of searches. As we explained during our conferences, we were requesting Plaintiffs final set of searches because it would have permitted us to process all required publisher notices at one time. However, since Plaintiffs appear unwilling to submit any additional searches, we respectfully seek your guidance on whether the process will be complete once Google produces data requiring publisher notice from the following three sources:

- [REDACTED]
- [REDACTED]
- [REDACTED]

Respectfully,

Josef Ansorge

Of Counsel,

Quinn Emanuel Urquhart & Sullivan, LLP

1300 I Street, NW, Suite 900
Washington, D.C. 20005
202-538-8267 Direct
202.538.8000 Main Office Number
202.538.8100 FAX
josefansorge@quinnemanuel.com
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From: Mark C. Mao <mmao@BSFLLP.com>

Sent: Thursday, March 31, 2022 10:30 AM

To: Josef Ansorge <josefansorge@quinnemanuel.com>; Douglas Brush <douglas.brush@accelconsulting.llc>; QE Brown <qebrown@quinnemanuel.com>

Cc: GOOGLETEAM@lists.susmangodfrey.com; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>

Subject: RE: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

[EXTERNAL EMAIL from mmao@bsfllp.com]

Mr. Ansorge:

Good morning.

At minimum, do you dispute that you have not produced historical data or responses from three log sources? Because if you do not dispute that, you have not finished the prior searches.

And is there any question that you have not produced a full list of all data sources that can contain one of the three incognito-bits? What about full schemas? If you do not dispute that, you also have not complied with the November 12 Order.

If your point is that Google refuses to finish, then you do not need to respond.

Respectfully,

From: Josef Ansorge <josefansorge@quinnemanuel.com>
Sent: Thursday, March 31, 2022 7:14 AM
To: Mark C. Mao <mmao@BSFLLP.com>; Douglas Brush <douglas.brush@accelconsulting.llc>; QE Brown <gebrown@quinnemanuel.com>
Cc: GOOGLETEAM@lists.susmangodfrey.com; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Subject: RE: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

Mr. Mao,

Search 2 is finished. The responsive data has been produced. The Special Master made clear at our last conference that the priority is to get in the third and final set of searches. As you know, we have been requesting Plaintiffs' search selection for weeks. If Plaintiffs do not intend to select any further sources for searches, please inform us immediately. If Plaintiffs do select additional searches, we are of course happy to meet and confer with Plaintiffs on those searches.

Respectfully,

Josef Ansorge
Of Counsel,
Quinn Emanuel Urquhart & Sullivan, LLP

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From: Mark C. Mao <mmao@BSFLLP.com>
Sent: Thursday, March 31, 2022 2:07 AM
To: Douglas Brush <douglas.brush@accelconsulting.llc>; QE Brown <gebrown@quinnemanuel.com>
Cc: GOOGLETEAM@lists.susmangodfrey.com; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Subject: RE: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

[EXTERNAL EMAIL from mmao@bsfllp.com]

Special Master Brush: Attached please find Plaintiffs' contribution to the Joint Update. Please note that Google has refused to meet and confer to finish Search 2 and the Test Searches as ordered. Please have a good evening.

From: Mark C. Mao
Sent: Wednesday, March 30, 2022 1:20 PM

To: Douglas Brush <douglas.brush@accelconsulting.llc>; Tracy Gao <tracygao@quinnemanuel.com>; QE Brown <gebrown@quinnemanuel.com>
Cc: GOOGLETEAM@lists.susmangodfrey.com; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Subject: RE: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

Special Master Brush:

Received. Plaintiffs will respond and revert to this today. Please have a good evening.

From: Douglas Brush <douglas.brush@accelconsulting.llc>
Sent: Wednesday, March 30, 2022 1:17 PM
To: Tracy Gao <tracygao@quinnemanuel.com>; Mark C. Mao <mmao@BSFLLP.com>; QE Brown <gebrown@quinnemanuel.com>
Cc: GOOGLETEAM@lists.susmangodfrey.com; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>
Subject: Re: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

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Mr. Mao,

Please review and make any additional changes ASAP.

These discovery issues need to put to bed this week or there will be no choice but to recommend sanctions on Parties for further delays.

Best,

Doug

Douglas Brush

President

M 917.470.9140

E douglas.brush@accelconsulting.llc

Accel Consulting LLC

BOULDER, CO 80301

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From: Tracy Gao <tracygao@quinnemanuel.com>
Date: Wednesday, March 30, 2022 at 1:51 PM
To: Mark C. Mao <mmao@BSFLLP.com>, QE Brown <gebrown@quinnemanuel.com>
Cc: GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>, Timothy Schmidt <timothy.schmidt@accelconsulting.llc>, Douglas Brush <douglas.brush@accelconsulting.llc>
Subject: RE: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

Counsel,

I'm attaching here my earlier email with the side-by-side response in case you missed it.

Best,
Tracy

From: Mark C. Mao <mmao@BSFLLP.com>
Sent: Wednesday, March 30, 2022 3:01 PM
To: Tracy Gao <tracygao@quinnemanuel.com>; QE Brown <gebrown@quinnemanuel.com>
Cc: GOOGLETEAM@lists.susmangodfrey.com; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; Douglas Brush <douglas.brush@accelconsulting.llc>
Subject: RE: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

[EXTERNAL EMAIL from mmao@bsfllp.com]

Counsel – We disagree with you, and am disappointed that you would not even meet and confer with a meeting. Still, you said that you would produce a side-by-side response. When should we expect that, so that we can prepare our response on the chart?

From: Tracy Gao <tracygao@quinnemanuel.com>
Sent: Wednesday, March 30, 2022 9:35 AM
To: Mark C. Mao <mmao@BSFLLP.com>; QE Brown <gebrown@quinnemanuel.com>
Cc: GOOGLETEAM@lists.susmangodfrey.com; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; Douglas Brush <douglas.brush@accelconsulting.llc>
Subject: RE: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

Dear Special Master Brush, Mr. Schmidt, counsel:

Please find attached Google's letter regarding the Special Master's March 29 request for a joint status update. Google will provide side-by-side response to the items Plaintiffs listed below in a joint chart.

Best,
Tracy

From: Mark C. Mao <mmao@BSFLLP.com>
Sent: Wednesday, March 30, 2022 11:07 AM
To: QE Brown <gebrown@quinnemanuel.com>
Cc: GOOGLETEAM@lists.susmangodfrey.com; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; Douglas Brush <douglas.brush@accelconsulting.llc>
Subject: FW: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

[EXTERNAL EMAIL from mmao@bsfllp.com]

Counsel:

Good morning. We still have not received a response to our meet and confer below, response to Mr. Schmidt, or time for our request to meet and confer as ordered.

I provided a dispute inventory below as raised on March 27. I provide them again here, after reviewing again anything produced since March 27. For Iterative Search 2 and the Special Master Ordered Test Searches:

1. Google still has not produced a full list of all logs that contain one of the three possible “incognito” bits.
2. Google has not been searching the data sources in a manner consistent with how Google knows that data is stored. For instance, it appears that some Google process appends a “gfe(gzip)” string to the end of User Agents within Google’s logs. Google’s engineers should know this. Instead, Google has been searching with the raw User Agent values we provided them (which were collected as they traveled over the network), and searching them as if there should be an exact match despite the change. There were further encoding issues present within the search script (e.g., ; was replaced with \x3B). The request to search via IP address and User Agent was unambiguous and stated in plain English. Plaintiffs expect Google to collaborate in good faith and conduct the searches in order to return results, and investigate the cause when no results were allegedly returned.
3. Google appears to have redacted the last octet of IP addresses in some records produced that were from January and February. This is within the window that the full IP address should still be present. Also, it is unclear how this affected Google’s searches based on IP addresses and user agent string. Plaintiffs ask for a clear explanation on this as well.
4. For the searches conducted on Analytics logs within [REDACTED], Google selected a seemingly arbitrary set of fields to return, rather than the complete set of fields. Further, Google did not select the *same* set of fields across the searches. For example, looking at the search script, for the “By Biscotti ID” data set, Google only selected the Biscotti ID, omitting the CID and UID values regardless of whether they were present. Google then omitted the Biscotti ID when generating the “by CID” data set. Google’s arbitrary selection appears aimed at obscuring linkages amongst IDs, which is against the spirit of what they were ordered to do. Google should return all fields and columns in the search results.
5. Google is claiming technical issues with respect to historical UMA searches, but is not providing us with a clear explanation of what mechanisms they are using for the search. Are they attempting to use Dremel? Or were they using Flume? Neither Google’s letter nor script made clear what they were searching. And Plaintiffs are unable to assess their efforts without insight into what they are doing. Plaintiffs respectfully ask for clarity.
6. Google has *still* not produced the schema for [REDACTED] logs.
7. Google has not produced results from the [REDACTED] log.
8. Google has not produced results from the [REDACTED] log.
9. Google has not produced results from the [REDACTED] log.
10. Google has not produced [REDACTED] Biscotti ID results for [REDACTED].
11. Google has not produced results for [REDACTED] CIDs and [REDACTED] UIDs for the [REDACTED] log.
12. The Google produced search script is often incomplete, with no line wrapping and is cut off. This should be easily fixable.
13. Google has not produced an inventory of what it is withholding allegedly on the basis of “publisher consent.” On 3/24, Plaintiffs provided a framework and recommendation by how this may be managed and checked so that the parties can move forward. Google has not responded.
14. Google has not produced what was previously withheld on the basis of “publisher consent,” but now may be produced. There needs to be a time definite as to when this would be produced.

Thanks.

From: Mark C. Mao

Sent: Sunday, March 27, 2022 1:36 PM

To: Douglas Brush <douglas.brush@accelconsulting.llc>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>

Cc: QE Brown <gebrown@quinnemanuel.com>; GOOGLETEAM@lists.susmangodfrey.com

Subject: RE: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

Special Master Brush and Mr. Schmidt:

With regard to Google's production of analytics data from [REDACTED] on Friday ~

- For the IP address, user agent searches, Google is using a gfe(gzip) suffix to search the logs and sources, which is not how they are stored.
- Google only selected a random assortment of columns that are of questionable relevance to our query. The Special Master can see this in the structure of the query where Google explicitly selected specific columns (" [REDACTED], [REDACTED], [REDACTED]"... instead of [REDACTED] where [REDACTED] would have given Plaintiffs the full production). For the columns Google did select, it is totally unclear why Google thought those were responsive and others were not.
- Google did not select overlapping identifiers even though at least a few of these data sources should contain multiple. For example, Google queried [REDACTED] by both Biscotti and Google Analytics UID, but did not include the Biscotti in the UID results, nor did Google include the UID in the Biscotti results
- The PDF containing the search script was not printed with line wrapping enabled and is cut off. Therefore we cannot determine the full set of identifiers queried or any other potential issues with the script.
- Google is redacting IP addresses in the production. These are records from January and February 2022, and Google has given no indication of why they did this, or how this affects how they have been searching and what they produced.

With regard to Google's production of UMA data on Friday ~

- Google has not produced what was ordered. In so far as Google is arguing for the first that they have now encountered some type of technical difficulty, it is unclear what difficulty they are facing, and what tool they are using for that.

We think that the fastest way to get answers on these two areas above, and to be able to move forward, is to have our consultants talk with the Google engineers about the searches done. This would be done with your supervision of course, and we would again ask that the lawyers refrain from participation in the process.

In addition, Google still has not produced data or produced incomplete data from the following logs and sources from the prior searches (Iterative Search 2 and Testing Search):

- All logs containing the "maybe_chrome_incognito" bit – Google only produced schema, but no data;
- [REDACTED] – Plaintiffs produced [REDACTED] Biscotti IDs, but only received [REDACTED] files. Plaintiffs are missing [REDACTED] Biscotti ID results;
- [REDACTED] log – Google has not produced anything;
- [REDACTED] log – Google has not produced anything;
- [REDACTED] log – Google has not produced anything;
- [REDACTED] – Google has not produced results for [REDACTED] CIDs and [REDACTED] UIDs.

Lastly, Special Master, the *Brown* Plaintiffs point out that Google still has not responded to our correspondences on 3/22 and 3/24, regarding what else is outstanding. I attach these correspondences for your review.

Thank you in advance.

From: Josef Ansorge <josefansorge@quinnemanuel.com>

Sent: Saturday, March 26, 2022 8:59 AM

To: Douglas Brush <douglas.brush@accelconsulting.llc>; Ryan McGee x3030 <rmcgee@forthepeople.com>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; Mark C. Mao <mmao@BSFLLP.com>

Cc: QE Brown <gebrown@quinnemanuel.com>; GOOGLETEAM@lists.susmangodfrey.com

Subject: Re: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

Special Master Brush,

Thank you for your email and guidance. Google is ready to initiate the final set of searches, including searches across the preserved data you referred to in your email. We look forward to receiving the final set of search requests from Plaintiffs and to working with Plaintiffs and the Special Master team to successfully close out the Special Master process.

Best,

Josef Ansorge

Of Counsel,

Quinn Emanuel Urquhart & Sullivan, LLP

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From: Douglas Brush <douglas.brush@accelconsulting.llc>

Sent: Saturday, March 26, 2022 11:35

To: Ryan McGee x3030 <rmcgee@forthepeople.com>; Josef Ansorge <josefansorge@quinnemanuel.com>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; Mark C. Mao <mmao@BSFLLP.com>

Cc: QE Brown <gebrown@quinnemanuel.com>; GOOGLETEAM@lists.susmangodfrey.com
<GOOGLETEAM@lists.susmangodfrey.com>

Subject: Re: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

[EXTERNAL EMAIL from douglas.brush@accelconsulting.llc]

Mr. McGee and Mr. Ansorge,

Where are we in the search negotiations and a proposed plan for final searches?

As for the “Preserved” data listed below, I am to assume this is the blanked data put on litigation hold, that has not been produced due to 3rd party notification issues.

This data needs to be searched in accordance with the Special Master process and order. This is the process I want followed and to end the dispute about its production.

Best,

Doug

Douglas Brush

President

M 917.470.9140

E douglas.brush@accelconsulting.llc

Accel Consulting LLC

BOULDER, CO 80301

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From: Ryan McGee x3030 <rmcgee@forthepeople.com>

Date: Thursday, March 24, 2022 at 8:30 PM

To: Josef Ansoorge <josefansorge@quinnemanuel.com>, Douglas Brush <douglas.brush@accelconsulting.llc>, Timothy Schmidt <timothy.schmidt@accelconsulting.llc>, Mark C. Mao <mmao@BSFLLP.com>

Cc: QE Brown <gebrown@quinnemanuel.com>, GOOGLETEAM@lists.susmangodfrey.com <GOOGLETEAM@lists.susmangodfrey.com>

Subject: Re: *EXT* Brown v. Google: Additional Descriptive Statistics re: Preserved Data

Special Master Brush, Mr. Schmidt, and Counsel:

Regarding the below “preserved data,” the *Brown* Plaintiffs think what would help the parties move onward is:

- A full production of all of Plaintiffs’ identifiers from the “preserved data,” for what was withheld below. If no identifiers were withheld, Google should so indicate.
- For the below that Google is withholding, the parties need a record of what exactly is being held back.
 - At minimum, Plaintiffs would be entitled to field descriptions. This way, if there is any future dispute, there is no disagreement as to what was withheld, and on what alleged basis.
 - Without descriptions, there is no record of what Google is currently claiming needs “publisher permission.” The Special Master and Court cannot evaluate the propriety of Google’s claim.

If Google is willing to agree to the proposed interim solution above, Plaintiffs can wait longer for the rest of their preserved data, while proceeding forward beyond the issue of “preserved data” at least for their searches. The *Brown* Plaintiffs maintain that they are entitled to all of their data, and a full production of the preserved data as ordered. The compromise offered here is merely an interim solution, and the *Brown* Plaintiffs do not hereby waive any rights or objections.

Lastly, the *Brown* Plaintiffs note that their willingness to work with Google on this for “preserved data” is not a compromise on getting complete and fulsome search results. We agree with the Special Master’s reminder yesterday, which is that the full productions were ordered.

Thank you,
Ryan

We hope this additional information is helpful to the Special Master to determine whether, and for which publishers, Google should provide reasonable notice to produce previously preserved records. As stated during today's meet and confer, Google is prepared to provide notice to all the publishers [REDACTED] associated with Plaintiffs' second set of search requests. Alternatively, we are also prepared to provide notice to the top publishers by record for preserved data and second set of search requests. To minimize the burden, we respectfully request that the publisher notice be conducted simultaneously for both cases (*Calhoun* and *Brown*) and all further required notices be processed together at one time.

Special Master Brush: Please let us know how we should proceed.

We look forward to working with Plaintiffs and the Special Master team to close out the Special Master process this week.

Best,

Josef Ansorge
Of Counsel,
Quinn Emanuel Urquhart & Sullivan, LLP

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EXHIBIT 19

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EXHIBIT 38

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Attorneys for Plaintiffs

**UNITED STATES DISTRICT COURT
 NORTHERN DISTRICT OF CALIFORNIA
 SAN JOSE DIVISION**

CHASOM BROWN, WILLIAM BYATT,
 JEREMY DAVIS, CHRISTOPHER
 CASTILLO, and MONIQUE TRUJILLO,
 individually and on behalf of all other similarly
 situated,

Plaintiffs,

v.

GOOGLE LLC,

Defendant.

William S. Carmody (admitted *pro hac vice*)
 Shawn Rabin (admitted *pro hac vice*)
 Steven M. Shepard (admitted *pro hac vice*)
 Alexander Frawley (admitted *pro hac vice*)
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 jyanchunis@forthepeople.com
 mram@forthepeople.com
 rmcgee@forthepeople.com

Case No. 5:20-cv-03664-LHK-SVK

**PLAINTIFFS' NOTICE OF DEPOSITION
 PURSUANT TO RULE 30(B)(6)**

PLEASE TAKE NOTICE that, pursuant to Rule 30(b)(6) of the Federal Rules of Civil Procedure, on a date to be agreed upon by the Parties, counsel for Plaintiffs will take the videotaped deposition(s) of the designated representative(s) of Google LLC ("Google") best able to testify as to the Topics set forth in Appendix A. Google has a duty to designate one or more officers, directors, managing agents, or other persons with sufficient knowledge to testify fully regarding the Topics listed in Appendix A. No later than ten business days prior to the deposition, Google shall identify the person(s) who will testify on its behalf pursuant to this notice and the matter(s) about which each person will testify. Google shall also produce to Plaintiffs any documents that Google used or plans to use to prepare the person(s) testifying.

The deposition(s) shall be taken through a mutually agreed upon videoconference program (e.g., Zoom), and before a Notary Public or some other officer authorized by law to administer oaths for use at trial. The deposition(s) will be videotaped and will continue from day to day until completed.

Dated: December 3, 2021

SUSMAN GODFREY LLP

By: Amanda Bonn
Amanda Bonn

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Attorneys for Plaintiffs

APPENDIX A

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DEFINITIONS

1. The term “all” includes the word “any,” and vice versa.

2. The terms “concerning” or “relating to” include addressing, analyzing, concerning, constituting, containing, commenting on, discussing, describing, identifying, in connection with, referring to, reflecting, relating, relating to, reporting on, stating, or dealing with, in whole or in part, in addition to their customary and usual meanings, and shall be construed in the broadest sense possible.

3. The term “document” and “documents” shall be synonymous in meaning and equal to the broadest meaning provided by Rule 34 of the Federal Rules of Civil Procedure including, without limitation, original and any non-identical copy of every kind of written, printed, typed, recorded, or graphic matter, however produced or reproduced, including all correspondence, letters, telegrams, telexes, messages, memoranda, instructions, emails, handwritten or recorded notes, and all records, schedules, reports, surveys, calculations, transcripts, notes, time cards, personal expense reports, appointment books, calendars, plans, purchase orders, contracts, subcontracts, charts, communications, database, data compilation, diary, draft drawing, electronically stored information, emails, fax, floppy disk, graph, hard drive, image, index, instant message, letter, log, magnetic tape, memorandum, note, optical disk, photograph, report, sound recording, spreadsheet, storage device, text message, version, voicemail or writing. This term shall apply to any document, whether in hard copy or electronic form, on any computers or other system.

4. The term “Google” means Google LLC and any of its directors, officers, consultants, agents, representatives, predecessors in interest, subsidiaries, assignees, licensees, employees, attorneys and any other persons acting on Google LLC’S behalf, including contractors.

5. The term “include” or “including” means “include, but not limited to” or “including, but not limited to.”

GENERAL INSTRUCTIONS

For purposes of reading, interpreting, or construing the scope of the Definitions, General Instructions, and Topics, all of the terms shall be given their most expansive and inclusive interpretation. This includes the following:

- 1 (a) The singular form of a word shall be interpreted as plural, and vice versa.
- 2 (b) “And,” “or,” as well as “and/or” shall be construed either disjunctively or
- 3 conjunctively as necessary to bring within the scope of the Topic anything
- 4 that might otherwise be construed to be outside the scope of the Topic.
- 5 (c) “All,” “each” and “any” shall be construed as “all, each, and any.”
- 6 (d) The use of a verb in any particular tense shall be construed as the use of the
- 7 verb in all other tenses as necessary to bring within the scope of the Topic
- 8 any document that might otherwise be construed to be outside the scope of
- 9 the Topic.

10 TOPICS

11 1. For the Class Period, the information Google collects whenever a user visits a

12 website that has enabled either (1) Google Analytics (including Universal Analytics, Google

13 Analytics 4 and Google Analytics 360) or (2) Google Ad Manager (including Google Ad Manager

14 360)—as well as the transmission of that information to Google. This Topic includes: (a) identifying

15 the scripts or code that transmit the information or cause it to be transmitted; (b) explaining how

16 those scripts or code function and the technical process by which the information collection and

17 transmission occurs; (c) any changes to those scripts or code during the Class Period; (d) the form,

18 format, or content of the information; (e) the extent to which the user’s decision to use a private

19 browsing mode (including Chrome Incognito, mobile and non-mobile) impacts the information

20 collection and transmission processes; (f) Google’s collection of the X-Client Data Header (or lack

21 thereof) and the X-Geo Data Header (or lack thereof); (g) the extent to which signing-in and out of

22 a Google account impacts the information collection and transmission processes; and (h) the extent

23 to which signing-in and out of third-party websites impacts the information collection and

24 transmission process.

25 2. For the Class Period, the information that Google collects whenever an individual

26 uses any private browsing mode (e.g., Chrome, Safari, IE, Edge and Firefox on either mobile or

27 non-mobile) to visit a website that has enabled conversion tracking and/or remarketing (alone or in

28 combination with Google Tag Manager and/or Google Analytics), as well as the transmission of

1 that information to Google. This Topic includes: (a) identifying the scripts or code that transmit the
2 information or cause it to be transmitted; (b) explaining how those scripts or code function and the
3 technical process by which the information collection and transmission occurs; (c) any changes to
4 those scripts or code during the Class Period; (d) the form, format, or content of the information;
5 (e) the extent to which the user's decision to use Chrome Incognito (as opposed to normal Chrome)
6 impacts the information collection and transmission process; (f) Google's collection of the X-Client
7 Data Header (or lack thereof) and the X-Geo Data Header (or lack thereof); (g) the extent to which
8 signing-in and out of Google account in Incognito mode impacts the information collection and
9 transmission process; and (h) the extent to which signing-in and out of third-party websites impacts
10 the information collection and transmission process.

11 3. For the Class Period, any Google setting or control that can or does stop the
12 collection and transmission to Google of information referred to in Topics 1-2. This Topic includes
13 the reasons why such setting or control can or does stop the collection and transmission to Google
14 of the information referred to in Topics 1-2 or, alternatively, the reasons for why there is no such
15 setting or control.

16 4. Google's ability to alter Google Analytics, Google Ad Manager, Chrome Incognito,
17 or conversion/remarketing tracking to prevent Google from collecting information from users
18 during private browsing sessions.

19 5. Google's ability to alter Google Analytics, Google Ad Manager, Chrome Incognito,
20 or conversion/remarketing tracking to prevent Google from storing information collected from
21 users during private browsing sessions.

22 6. For the Class Period, any consideration or efforts by Google to change or limit the
23 information that Google collects from users during private browsing sessions. This Topic includes
24 without limitation work done by employees in the Chrome group, User Experience Research
25 employees, the Privacy & Data Protection Office, and the Privacy Working Group, as well as any
26 similar Google departments or groups.

27 7. Google's storage of the information referred to in Topics 1-2, including (a) the extent
28 to which that storage changes based on whether the user signs in to Google at the beginning, in the

1 middle, or at the end of a private browsing session, (b) the extent to which that storage changes
2 based on whether the user signs in to a third-party website at the beginning, in the middle, or at the
3 end of a private browsing session, and (c) whether private browsing information is separated from
4 or comingled with regular browsing mode information.

5 8. The extent to which users can view or delete the information referred to in Topics
6 1-2, including both viewing or deleting the information on their own browsers and devices as well
7 as within Google's servers.

8 9. Google's preservation of the information referred to in Topics 1-2 for purposes of
9 this litigation. This topic includes (a) the mechanisms being used to preserve this information, and
10 the names of those mechanisms and (b) any mechanisms that could be used to preserve this
11 information but that are not being used.

12 10. The purpose of the `is_chrome_non_incognito_mode` bit in [REDACTED] logs, as well as
13 how it is determined, where it is stored, what other information is stored with the bit, how to retrieve
14 the bit and any associated information, and how long the bit and any associated information are
15 stored. *See* GOOG-BRWN-00176433.

16 11. The factual basis for any and all affirmative defenses that Google asserts or intends
17 to assert in this case, including all technical details relevant to those defenses.

18 12. The ability of Google employees to, throughout the Class Period, access in
19 California private browsing information collected from users throughout the United States.
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PROOF OF SERVICE

I, Alexander Frawley, declare:

I am a citizen of the United States and employed in New York, New York. I am over the age of 18 and not a party to the within action; my business address is 1301 Avenue of the Americas, 32 Floor, New York, NY 10019.

On December 3, 2021, I served the following document(s) described as:

PLAINTIFFS' NOTICE OF RULE 30(b)(6) DEPOSITION

- ☐ **BY FACSIMILE TRANSMISSION:** As follows: The papers have been transmitted to a facsimile machine by the person on whom it is served at the facsimile machine telephone number as last given by that person on any document which he or she has filed in the cause and served on the party making the service. The copy of the notice or other paper served by facsimile transmission shall bear a notation of the date and place of transmission and the facsimile telephone number to which transmitted or be accompanied by an unsigned copy of the affidavit or certificate of transmission which shall contain the facsimile telephone number to which the notice of other paper was transmitted to the addressee(s).
- ☐ **BY MAIL:** As follows: I am readily familiar with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with U.S. postal service on that same day with postage thereon fully prepaid at San Francisco, CA, in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postage cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.
- ☐ **BY OVERNIGHT MAIL:** As follows: I am readily familiar with the firm's practice of collection and processing correspondence for overnight mailing. Under that practice, it would be deposited with overnight mail on that same day prepaid at San Francisco, CA in the ordinary course of business.
- ☒ **BY ELECTRONIC MAIL TRANSMISSION:** By transmitting a PDF format copy of such document(s) to each such person at the e-mail address(es) listed below their address(es). The document(s) was/were transmitted by electronic transmission and such transmission was reported as complete and without error.

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Executed on December 3, 2021, at New York, NY.

Alexander Frawley

Alexander Frawley

Case No. 5:20-cv-03664-LHK

EXHIBIT 39

Redacted in its Entirety

Declaration of Chris Liao

**Redacted Version
of Document
Sought to be Sealed**

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Attorneys for Defendant Google LLC

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA, OAKLAND DIVISION**

CHASOM BROWN, *et al.* individually
and on behalf of all similarly situated,

Plaintiffs,

v.

GOOGLE LLC,

Defendant.

Case No. 4:20-cv-5146-YGR-SVK

**DECLARATION OF CHRIS LIAO RE:
MAYBE_CHROME_INCOGNITO
BOOLEAN FIELD**

The Honorable Susan van Keulen

1 I, Huei-Hung “Chris” Liao, declare as follows:

2 1. I am currently a Software Engineer manager and lead for Ads Identity &
3 Infrastructure at Google and have been employed at Google for the past 10 years. In my role as a
4 manager and tech lead for Ads Identity & Infrastructure, I manage teams responsible for the [REDACTED]
5 [REDACTED] and other parts of Google’s ads serving infrastructure. As a result of my
6 role and responsibilities, I am familiar with signals sent from a Chrome browser to Google in ad
7 requests, and am aware of a [REDACTED]
8 [REDACTED]. Except where otherwise indicated, I make this declaration
9 based on my own personal knowledge and could competently testify thereto.

10 2. I received a litigation hold for this matter on December 2, 2020.

11 3. In March 2019, my team and I worked with a group of Chrome engineers to estimate
12 the impact that deprecating third-party cookies by default in Chrome’s Incognito mode may have
13 on Google’s advertising revenue. The core challenge of constructing this estimate was that Chrome
14 does not send any reliable or dedicated signal to indicate that traffic is coming from a browser in
15 Incognito mode. A “signal” in this context means information sent from the browser for a dedicated
16 purpose. For example, the user-agent HTTP header is a signal sent from a Chrome browser to
17 websites, including Google, for websites to properly render information.

18 4. I understand that the absence of a signal specific to Chrome’s Incognito mode is
19 intentional; a key design principle for private browsing mode is that it should not be detectable to
20 the website being visited. See [W3C TAG Observations on Private Browsing Modes](#) (describing how
21 “browser vendors should work towards achieving private browsing mode” so that it is
22 “indistinguishable” from the “normal mode” to the sites being visited “to respect the user’s privacy
23 in choosing it.”).

24 5. Given the absence of a reliable or dedicated signal to Google’s ad serving
25

1 infrastructure for Chrome Incognito mode, we attempted to estimate the aggregate potential revenue
2 impact of deprecating third-party cookies through a method that relied on drawing inferences from
3 the absence of the X-Client-Data header from traffic that appears to come from an instance of the
4 Chrome browser. In computer science, we sometimes refer to such an approximate method as a
5 “heuristic.” I understood then, as I do now, that this method is not a reliable means to detect Chrome
6 Incognito traffic. This method is based on the fact that the X-Client-Data header is generally not
7 sent by browsers in Chrome’s Incognito mode. However, there are two primary hurdles associated
8 with using the absence of this header to infer Incognito mode, which I discuss in turn below.

9 6. *First*, assuming one has accurately identified all Chrome traffic, there are multiple
10 reasons why the X-Client Data field may be empty even though the browser is not in Incognito
11 mode. Therefore, relying on the X-Client-Data header in Chrome traffic to indicate Incognito mode
12 will erroneously count traffic from non-Incognito sessions as traffic from Incognito sessions.

13 7. *Second*, this heuristic relies on being able to accurately identify all Chrome traffic.
14 The X-Client-Data header is only sent from Chrome browsers; other browsers will not send an X-
15 Client-Data header. It is therefore necessary to isolate Chrome traffic from all of the other browser
16 traffic that does not include X-Client-Data header. Another header, the user-agent header, is used
17 to determine whether a request came from a Chrome browser. Unfortunately, however, the user-
18 agent HTTP header is easy to spoof and manufacture. Therefore, this method will falsely count all
19 traffic coming from browsers in which the user-agent has been altered to indicate it is coming from
20 a Chrome browser. Altering user-agent is not a theoretical concern. Apple’s Safari browser has a
21 built-in feature that permits users to spoof a Chrome user-agent and there are Mozilla Firefox add-
22 ons that fulfill the same function.

23 8. The need for the approximation of Chrome Incognito mode through the method
24 below arose because Google has no tools to approximate and infer Chrome Incognito traffic with
25

1 precision. I therefore used the heuristic method described above to provide an approximate
2 aggregate revenue impact projection related to the [REDACTED]. Because of the false
3 positive scenarios described above associated with relying on the absence of the X-Client-Data
4 header, this method cannot reliably identify individual instances of Incognito mode browsing, let
5 alone individual users who are in Incognito mode while logged out of their Google Accounts.

6 9. In May 2020, as a continuation of the work related to the [REDACTED], my
7 team was asked to help identify percentages of traffic that blocked third-party cookies by default—
8 for example, Apple Safari and Chrome Incognito (the “[REDACTED]”). The purpose
9 of this exercise was [REDACTED]
[REDACTED]
[REDACTED].

12 10. For the [REDACTED], I tasked two engineers on my team, Bert Leung
13 and Mandy Liu, [REDACTED]
[REDACTED]. The team decided to create a new boolean field to approximately indicate Chrome
15 Incognito so that it could monitor traffic and its trends on the dashboard. The basis for this field
16 was the work related to [REDACTED] we had done in May 2019, specifically, the heuristic method
17 to approximately infer Chrome Incognito traffic using existing signals in ad requests: the absence
18 of the X-Client-Data header and the user-agent check. From May 2020 to March 2022, Bert Leung
19 and Mandy Liu implemented the same heuristic method in a boolean field named
20 “maybe_chrome_incognito_DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TE
21 AM.” The value of this field is a binary unit or “bit,” which is the smallest unit of data storage in
22 computing and has only a 1 or 0 value. In other words, the

23 “maybe_chrome_incognito_DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TE
24 AM” bit only indicates whether it is “true” or “false” that traffic was received with a Chrome user-

25

1 agent and without an X-Client-Data header. The bit cannot identify individual users browsing in
2 Incognito mode.

3 11. We named the field
4 "maybe_chrome_incognito_DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TE
5 AM" to ensure that nobody erroneously believes that this data accurately or reliably identifies
6 Chrome Incognito mode. I suggested the team working on the bit change the beginning of the name
7 from "is" to "maybe" to reflect that it was not a definite measure of Incognito traffic.

8 12. The Cookie Monitoring Dashboard for Search and Display Ad Serving that uses the
9 "maybe_chrome_incognito_DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TE
10 AM" boolean field was officially launched on March 2, 2022.

11 13. During my December 3, 2021 deposition in this case, counsel asked me about URL
12 parameters that are related to privacy and whether, "As far as you're aware, amongst these privacy
13 signals, is there one for incognito mode browsing on Chrome?" I answered, "No" and explained in
14 a follow-up question that "I am not aware of a URL parameter that would indicate incognito mode."
15 My answers were accurate then and remain correct today. There is no URL parameter or signal that
16 identifies Chrome Incognito mode. As explained above, the absence of the X-Client-Data header
17 has sometimes been used to infer browser state, but that is not its purpose and it is riddled with
18 inaccuracies. Further, as I stated at my deposition, "We did not, to my best knowledge, go on to
19 build any dedicated signals" because "it was determined that there was no reliable way to technically
20 detect incognito in a definitive and reliable and accurate manner." This is also entirely accurate. As
21 explained above, the
22 "maybe_chrome_incognito_DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TE
23 AM" bit is *not* a signal. The bit relies on the absence of an existing signal, the X-Client-Data header,
24 which as explained above is neither a reliable nor dedicated signal to detect Chrome Incognito

25

1 traffic.

2
3 I declare under penalty of perjury of the laws of the United States that the foregoing is true
4 and correct. Executed in Sunnyvale, California on April 4, 2022.

DocuSigned by:

Chris Liao

D1C78188A5A4406...
Chris Liao

Declaration of Bert Leung

**Redacted Version of
Document Sought to
be Sealed**

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**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA, OAKLAND DIVISION**

CHASOM BROWN, *et al.* individually
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GOOGLE LLC,

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Case No. 4:20-cv-5146-YGR-SVK

**DECLARATION OF BERT LEUNG RE:
MAYBE_CHROME_INCOGNITO
BOOLEAN_FIELD**

The Honorable Susan van Keulen

1 I, Wing Pan “Bert” Leung, declare as follows:

2 1. I am currently a Software Engineer, tech lead, and manager for Ads Identity &
3 Infrastructure at Google and have been employed at Google for the past eight years. As a result of
4 my role and responsibilities, I am familiar with signals sent from Chrome browsers to Google in ad
5 requests, as well as a dashboard used by Google to approximately infer Chrome Incognito traffic
6 using signals sent in ad requests. Except where otherwise indicated, I make this declaration based
7 on my own personal knowledge and could competently testify thereto.

8 2. I received a litigation hold for this matter on December 15, 2020.

9 3. In 2019, I worked with Chris Liao on a project to estimate the impact on Google’s
10 advertising revenue of deprecating third-party cookies by default in Chrome’s Incognito mode. This
11 was related to Google’s [REDACTED]

12 [REDACTED] Google’s ad serving infrastructure does not receive any reliable or dedicated signal
13 that identifies whether a user is in Chrome Incognito mode. (A “signal” is information sent from
14 the browser for a dedicated purpose.) Therefore, we could only estimate the aggregate potential
15 revenue impact of Chromeguard through a method that relied on drawing inferences from the
16 absence of the X-Client-Data header—a signal not sent by browsers in Chrome’s Incognito mode,
17 but that could also be missing for a number of different reasons.

18 4. There are two primary hurdles with inferring Incognito mode traffic from the absence
19 of the X-Client-Data header, which I discuss in turn below.

20 5. *First*, assuming one has accurately identified all Chrome traffic, there are multiple
21 reasons why the X-Client Data field may be empty even though the browser is not in Incognito
22 mode. Therefore, relying on the X-Client-Data header in Chrome traffic to indicate Incognito mode
23 will erroneously count traffic from non-Incognito sessions as traffic from Incognito sessions.

24 6. *Second*, this heuristic relies on being able to accurately identify all Chrome traffic.
25

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2 Client-Data header. It is therefore necessary to isolate Chrome traffic from all of the other browser
3 traffic that does not include X-Client-Data header. Another header, the user-agent header, is used
4 to determine whether a request came from a Chrome browser. Unfortunately, however, the user-
5 agent is one of the easiest HTTP headers to spoof and manufacture. Therefore, this method will
6 falsely count all traffic coming from browsers in which the user-agent has been altered to indicate
7 it is coming from a Chrome browser. Altering user-agent is not a theoretical concern. Apple's Safari
8 browser has a built-in feature that permits users to spoof a Chrome user-agent and there are Mozilla
9 Firefox add-ons that fulfill the same function.

10 7. I understood then, and understand now, that it is not a reliable method of detecting
11 event-level Chrome Incognito traffic and the project could only achieve a rough approximation of
12 the percentage of Chrome Incognito traffic in Google ad requests.

13 8. In May 2020, my supervisor Chris Liao tasked Mandy Liu and myself with using the
14 same heuristic-based¹ method to approximately infer Chrome Incognito traffic using the X-Client-
15 Data header and creating a dashboard for monitoring such traffic. In particular, we sought to
16 estimate changes in cookieless traffic over time (the [REDACTED]). Like earlier
17 efforts in 2019, the [REDACTED] needed only a rough estimate of Incognito mode
18 traffic for its purpose of identifying large changes in the same. Therefore, Ms. Liu and I used the
19 same logic for the same business purpose of estimating aggregate Incognito traffic. We understood
20 the method we were using to measure Incognito traffic was not at all precise, but that was not a
21 concern for this project, the aim of which was to identify changes in the aggregate traffic over time.

22 9. I approved that an output of our project would be a boolean field called
23 "maybe_chrome_incognito_DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TE
24

25 ¹ In computer science, we refer to such an approximate trial-and-error method as a "heuristic."

1 AM". This field is a "bit" that contains only a "true" or "false" value imprecisely indicating whether
2 traffic originated from a browser in Incognito mode. The bit does not contain any identifying
3 information for particular users. We decided to add the word "maybe" in the bit to underscore that
4 it was not a reliable detector of Incognito traffic. To further signal the limited purpose and efficacy
5 of the bit, we also decided to include in the bit's name a directive not to use the bit without consulting
6 the Ads Identity Team.

7 10. The following are all Google logs where the
8 "maybe_chrome_incognito_DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TE
9 AM" boolean field has been implemented:

11	[REDACTED]
12	[REDACTED]
13	[REDACTED]
14	[REDACTED]
15	[REDACTED]
16	[REDACTED]
17	[REDACTED]
18	[REDACTED]
19	[REDACTED]
20	[REDACTED]
21	[REDACTED]
22	[REDACTED]
23	[REDACTED]
24	[REDACTED]
25	[REDACTED]

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[REDACTED]
[REDACTED]

11. I have reviewed the November 18, 2021 declaration of Google employee Andre Golueke previously filed with the Court in this case. Two of the logs identified above [REDACTED] and [REDACTED] appear in Exhibit A of Mr. Golueke's declaration.

12. The [REDACTED] for Search and Display Ad Serving that uses the "maybe_chrome_incognito_DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TEAM" boolean field was officially launched on March 2, 2022.

13. In connection with the project, we drafted design documents that guided our efforts. These are types of documents we often prepare in our work at Google for new projects. Design documents explain the technical and engineering steps required by a project, such as the software tools to be employed and include high-level details about a project's status and purpose.

I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct. Executed in Mountain View, California on April 4, 2022.

DocuSigned by:
Wing Pan Leung
C074D50C782249C...
Bert Leung

Declaration of Andre Golueke

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16 *Attorneys for Defendant Google LLC*

17 UNITED STATES DISTRICT COURT

18 NORTHERN DISTRICT OF CALIFORNIA, OAKLAND DIVISION

20 CHASOM BROWN, *et al.*, individually and
21 on behalf of all similarly situated,

22 Plaintiff,

23 vs.

24 GOOGLE LLC,

25 Defendant.

Case No. 4:20-cv-03664-YGR-SVK

**DECLARATION OF ANDRE GOLUEKE
IN SUPPORT OF GOOGLE'S
OPPOSITION TO PLAINTIFFS'
REQUEST FOR AN ORDER FOR
GOOGLE TO SHOW CAUSE FOR WHY
IT SHOULD NOT BE SANCTIONED FOR
DISCOVERY MISCONDUCT**

Referral: Hon. Susan van Keulen, USMJ

DECLARATION OF ANDRE GOLUEKE

I, Andre Golueke, declare as follows:

1. I am a Strategy and Operational Support Lead within the Legal Department at Google LLC. I make this declaration based on personal knowledge and information provided to me by Google colleagues and, if called to testify, I could and would competently testify to such facts.

2. I have worked at Google since July 2011, and have worked on the Discovery Team in Google's Legal Department for that entire time. In my role on the Discovery Team, I have become familiar with Google's systems, including its many data repositories. I have also developed expertise at determining how to locate documents that are relevant and responsive to document requests, including by working with product managers and engineers familiar with specific data sources and identifying how best to obtain relevant data. In my current role, I oversee a team of eighteen members of Google's Legal Department, all of whom work on various aspects of discovery.

3. On February 17, 2021, I submitted a declaration in *Calhoun v. Google* related to the burden associated with categorically preserving all My Activity, Analytics, and Display Ads logs that may contain potentially relevant information. I understood from Plaintiffs' complaint in that action that Chrome, Display Ads, and Analytics were the products relevant to their claims. To prepare that declaration, I conducted interviews with relevant Google colleagues to determine how they had compiled potentially relevant log sources and understand what the preservation burden associated with those log sources was. Based on my own personal knowledge and the knowledge I acquired as a result of interviews with relevant Google subject matter experts from [REDACTED] Analytics, and Display Ads logs, I explained that categorical preservation would entail storing an estimated [REDACTED] of additional data every 30 days.

4. Since February 17, 2021, I have received periodic updates from the Google personnel who have been working to comply with Google's discovery obligations in *Brown v. Google* and *Calhoun v. Google* in general, and the Special Master process in particular.

1 5. On November 12, 2021, this Court ordered Google to provide a declaration
 2 attesting to the relevant sources identified, searches conducted, and data produced through the
 3 Special Master process. *See* Dkt. 332 at 8 (“Google shall provide a declaration, under penalty of
 4 perjury from Google, not counsel, that 1. ***To the best of its knowledge, Google has provided a***
 5 ***complete list of data sources that contain information relevant to Plaintiffs’ claims***; and 2. All
 6 responsive data related to the Named Plaintiffs have been produced from all searched data sources
 7 in the respective prior searches.”) (emphasis added).

8 6. To prepare a declaration in response to the Court’s November 12 order, I worked
 9 with Google engineers and other Google personnel and discussed how they went about identifying
 10 and searching relevant sources subject to the Special Master process. In particular, I had
 11 conversations with and asked questions of engineers who work regularly with the sources related
 12 to [REDACTED] Analytics, and Display Ads to understand how they had searched for and identified
 13 relevant sources. Through this process, Google compiled a list of [REDACTED] sources for this case. Those
 14 sources covered different products and storage systems, including: Ad Manager and Analytics
 15 [REDACTED] logs, [REDACTED], key-value databases ([REDACTED] and Analytics tables
 16 [REDACTED].

17 7. On November 18, 2021, I submitted a declaration in *Brown v. Google* in response
 18 to the Court’s November 12, 2021 order. *See* Dkt. 338. I attested that “[t]o the best of my
 19 knowledge and informed understanding, Google has provided a complete list of sources that
 20 contain information about Plaintiffs relevant to Plaintiffs’ claims.” *Id.* ¶ 3. The [REDACTED] separate data
 21 sources were listed in Exhibit A. *See* Dkt. 338-1. That declaration was accurate and complete to
 22 my knowledge, information, and belief at the time.

23 8. I am now informed that a dispute has arisen related to whether additional log
 24 sources that include certain specific fields should have been listed in the declaration. Specifically,
 25 I understand that Plaintiffs assert that the declaration should have listed (1) all logs that contained
 26 a particular Boolean field (known as “bit”), with the name “**maybe_chrome_incognito**
 27 **DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TEAM**”; and (2) various

1 [REDACTED] logs that contained two additional bits with the names “is_chrome_incognito” and
2 “is_chrome_non_incognito_mode”.

3 9. In preparing my November 18 declaration, I referred to the Court’s order and
4 Plaintiffs’ class definition to get an understanding of what data sources were relevant to Plaintiffs’
5 claims in this matter. At the time, Plaintiffs’ class was limited to users of private browsing
6 software who visited third-party websites that used Google Analytics and Google Ad Manager.
7 Dkt 136-1 at 55. With that definition and those products in mind, I communicated with Google
8 product managers and engineers knowledgeable about those services in order to identify data
9 sources, principally logs, containing relevant data about the claims and products at issue in the
10 case. This culminated in the list of [REDACTED] data sources identified in my declaration, and based on my
11 knowledge of Google’s systems, past experience, and discussions with relevant personnel, I
12 verified that to the best of my knowledge that Google had provided a complete list of data sources
13 containing information relevant to Plaintiffs’ claims.

14 10. As discussed above, my focus in compiling the data sources was to search for logs
15 and other sources that contained event-level user data (*i.e.*, data generated based on users’ actions)
16 relevant to the products and claims at issue. It was not focused on identifying every data source
17 that contained a particular field name or particular fields. Among other reasons, given the vast
18 number of data sources maintained at Google and the substantial number of fields (sometimes
19 numbering in the tens of thousands) contained in each source, attempting to identify relevant
20 fields, or attempting to identify every data source containing particular fields, would have been
21 very burdensome. Instead, I relied upon my experience and discussions with product managers
22 and engineers who work directly on the products and the topics related to Plaintiffs’ claims to
23 identify the data sources containing relevant data. I understand that Plaintiffs claim that Google
24 should have attempted to identify every data source that contained fields related to the
25 “maybe_chrome_incognito
26 DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TEAM” bit. But I do not
27 believe that conducting searches by field names made sense given how many sources and fields
28 exist at Google, given how many have nothing to do with the products and claims at issue here,

1 and given that there is no available tool to search all of Google's data sources and filter by field
2 name. Furthermore, at the time I was preparing my declaration, I was not aware that the
3 "maybe_chrome_incognito"
4 DO_NOT_USE_WITHOUT_CONSULTING_ADS_IDENTITY_TEAM" bit existed.

5 11. I also understand that Plaintiffs argue that the list included in my declaration should
6 have included logs containing the "is_chrome_incognito" and "is_chrome_non_incognito_mode"
7 bits. I understand from discussions with engineers at Google that these bits were created by the
8 [REDACTED] team within Google Search and stored in that team's [REDACTED] logs. At the time I
9 conducted my search for data sources containing information relevant to Plaintiffs' claims,
10 Plaintiffs' class definition was limited to users who had visited third-party websites that employed
11 Google Ads and Analytics, and did not relate to users of Google Search, which is owned and
12 operated by Google. Dkt 136-1 at 55. Accordingly, I did not consult engineers or other Google
13 personnel associated with Google Search or [REDACTED] logs when preparing my declaration, and did
14 not include those logs on the list I provided with my declaration. At the time I prepared my
15 declaration, I was not aware that those logs contained fields labeled "is_chrome_incognito" or
16 "is_chrome_non_incognito_mode".

17 I declare under penalty of perjury of the laws of the United States that the foregoing is true
18 and correct.

19 Executed in Sarasota, Florida, on April 1, 2022.

20 DocuSigned by:

21 Andre Golueke

22 Andre Golueke
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EXHIBIT 1

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EXHIBIT 2

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February 5, 2021

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VIA E-MAIL

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Re: ***Chasom Brown, et al., v. Google LLC, Case No. 5:20-CV-03664-LHK***

Dear Counsel:

I write on behalf of Google LLC (“Google”) in response to your January 19, 2021 letter regarding paragraph 4(a) of the ESI Order.

Plaintiffs allege they understood certain Google disclosures to mean that when they browsed the Internet in “private browsing” mode while not logged-in to their Google Account, Google would not receive the basic browsing data it collects on behalf of websites to provide Google Analytics and Ad Manager web-services. Thus, Plaintiffs’ claims turn on the narrow issue of how Google’s Privacy Policy and other disclosures may reasonably be interpreted.

Google is fulfilling its preservation obligations. Among other information, Google is preserving data related to the Google Accounts you have indicated are associated with the Named Plaintiffs. That data includes Plaintiffs’ Google Account name, Google Account ID, date of account creation, email address, alternate email address, IP logs that contain IP addresses and User Agents, cookie values related to Plaintiffs’ sign-ins, and My Activity information which would include—depending on user settings and actions—URL information of sites visited and time stamps.

Plaintiffs now ask Google to suspend the regular retention policies of all logs that may record any data from users’ private browsing in the United States. Plaintiffs claim that “it appears

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Google’s February 5, 2021 Ltr. to Plaintiffs’ Counsel

necessary to preserve all logs” of logged-in and logged-out users that may contain data generated during private browsing sessions “so that Plaintiffs can evaluate those logs and other data to assess the best way to identify private browsing mode users and the data collected from their private browsing.” Letter at 5. Google disagrees. Plaintiffs’ request is grossly disproportionate to the needs of the case.

Information About the Logs Implicated By Plaintiffs’ Preservation Demand

Plaintiffs’ preservation demand implicates certain [REDACTED] logs, [REDACTED] logs, and [REDACTED] logs. These logs contain information about user website visits. The [REDACTED] logs are linked to a user’s Google Account. The [REDACTED] and [REDACTED] logs are of two types: either linked to a user’s Google Account (“Google Account keyed logs”) or linked to another identifier (“non-Google Account keyed logs”).

The log data is not reasonably limited by geographic region, by browser, or by browser mode). For that reason, Plaintiffs’ preservation request sweeps in a plethora of data for millions of individuals who are not putative class members. Moreover, the data in Google Account-keyed logs is subject to user controls. At the “My Activity” page, a user can set auto-deletion periods (3 months, 18 months, or 36 months), as well as review and delete individual entries of the data Google received when that user visited a website that used Google services. Those deletion requests are then propagated to the relevant Google Account keyed logs. In addition, the data in the Google Analytics logs is subject to the control of the Google Analytics’ customers on whose behalf Google collects the data.

Suspending the Retention Periods On These Logs Is Not Feasible

First, the sheer size of these logs makes Plaintiffs’ demand unworkable. These logs cover [REDACTED], and include data reflecting the activity of [REDACTED] of users, many of whom are not putative class members. Google estimates that suspending preservation of these logs—even if possible—would result in an additional [REDACTED] of data needing to be stored every thirty days.¹ That would mean that to satisfy Plaintiffs’ demand, every thirty days Google would need to add the equivalent of [REDACTED] laptops to its server space. Further, any suspension of the retention periods is complex—it is not as simple as an on/off switch. The effort involved with suspending the retention periods would entail months of work by teams of engineers. Further, managing this volume of data for the indefinite duration of the litigation would involve hundreds, if not thousands, of hours of engineering work and cost millions of dollars in storage costs alone—which would continue increasing throughout the life of the case. By way of example, the size of one [REDACTED] log for a single 30 day period is [REDACTED]. It defies reason to believe that Plaintiffs will spend the resources necessary to host, manage, review, and actually use in this litigation many multiples of that amount of data.

¹ It would take [REDACTED] to download [REDACTED] over a high-speed gigabit Internet connection.

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Simply put, such substantial costs just for preservation are grossly disproportionate to the needs of a case in which Plaintiffs allege no monetary harm, and where they have yet to articulate a need for all of the data at issue. *See Lord Abbett Mun. Income Fund, Inc. v. Asami*, 2014 WL 5477639, at *3 (N.D. Cal. Oct. 29, 2014) (stating “[t]his district recognizes that the proportionality principle applies to the duty to preserve potential sources of evidence” and holding that requiring a party to continue to pay \$500 per month to store computers outweighed the likely benefit of maintaining the computers.) As explained above, the logs Plaintiffs demand Google preserve are overly inclusive and implicate a substantial amount of information that is irrelevant here because not limited to data associated with users in private browsing mode. A party need not preserve data beyond what is truly “needed to prosecute th[e] case.” *FTC v. DirecTV, Inc.*, 2016 WL 7386133, at *5 (N.D. Cal. Dec. 21, 2016) (no prejudice where although preservation was not perfect, it was sufficient for stated need). Since there is no reason to think that even a fraction of this data will ever be used in litigation, Plaintiffs’ demand that it all be preserved is disproportionate to the needs of the case. N.D. Cal. Guideline 1.03 (proportionality standard set forth in Rule 26(b)(1) applies to preservation of information); see also Fed. R. Civ. P. 37(e) Adv. Comm. Notes (2015) (“[P]erfection in preserving all relevant electronically stored information is often impossible.”). Preservation should not be required here because it is unworkable and Plaintiffs have failed to articulate a need for the information.

The authorities you cite are unavailing because none concerns a preservation burden of even remotely similar magnitude. *See Bright Sols. for Dyslexia, Inc. v. Doe 1*, 2015 WL 5159125, at *3 (N.D. Cal. Sept. 2, 2015) (court-ordered preservation was limited to ***data associated with one Google Account***); *In re Napster, Inc. Copyright Litig.*, 462 F. Supp. 2d 1060, 1067 (N.D. Cal. 2006) (case decided prior to 2015 amendment to the Federal Rules of Civil Procedure introduced “proportionality test”); *National Ass’n of Radiation Survivors v. Turnage*, 115 F.R.D. 543, 557–58 (N.D. Cal. 1987) (same).

Second, the data Plaintiffs are asking Google to preserve is not necessary to Plaintiffs’ claims and therefore not proportional to the needs of the case. Plaintiffs allege that Google identifies and tracks users when they are logged ***out*** of their Google Accounts and in private browsing mode. Compl. ¶ 192 (limiting class to users who browsed in private mode while “not logged into their Google account”). Google has explained that its systems are designed such that data generated by users who are logged out is not linked—or reasonably linkable—to those individuals. Google understands that Plaintiffs wish to test this proposition, but to do so, Plaintiffs do not require—and are not entitled to—all of Google’s website activity data that may be associated with US-based users. It is sufficient for Google to produce information sufficient to show that the data at issue is not linked, and not reasonably linkable, to individual users. Plaintiffs’ requested log data preservation is neither necessary for—or proportional to—showing the data at issue is not reasonably linked to individual users.

Nor would these logs help Plaintiffs identify purported class members. As Google has explained during the meet and confer process, Google does not maintain information to identify whether a user was private browsing. Therefore, contrary to your implicit assumption, there are no

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Google’s February 5, 2021 Ltr. to Plaintiffs’ Counsel

separate logs of private browsing data that Google then “aggregate[s]” with non-private browsing data. Ltr. at. 3. For the reasons explained in detail in our January 21, 2021 letter, Plaintiffs’ speculation about how they might be able to identify private browsing data in these logs and then link that data to specific users is unfounded and wrong. Ansorge 1/21/21 Ltr. To Richardson at 3-4.

Google is not required to fulfill Plaintiffs’ unreasonable preservation demand simply because Plaintiffs assert—without basis—that all log data, including those from logged-in users, are relevant. *See Am. LegalNet, Inc. v. Davis*, 673 F. Supp. 2d 1063, 1073 (C.D. Cal. 2009) (refusing to issue a preservation order where a preservation of “all information” relevant to the complaint as unduly burdensome); *see also Pettit v. Smith*, 45 F. Supp. 3d 1099, 1107 (D. Ariz. 2014) (“Whether preservation or discovery conduct is acceptable in a case depends on what is *reasonable*, and that in turn depends on whether what was done—or not done—was *proportional* to that case and consistent with clearly established applicable standards.”).

Third, the preservation you demand is unfeasible because it would undermine Google’s compliance with its legal obligations, its public commitment to user privacy, and compliance with its contractual obligations. Google’s procedures and processes are designed to comply with a complex array of applicable data privacy laws and regulations. Similarly, its retention periods and data privacy policies are carefully crafted to abide by Google’s legal obligations under laws in various jurisdictions in which it operates, including EU General Data Protection Regulation 2016/679, the California Consumer Privacy Act (CCPA), and Lei Geral de Proteção de Dados (LGPD). The retention policies at issue here reflect the requirements in these laws and regulations. The logs record data not limited by geographic region, by browser, or by browser mode (synced versus without sync enabled) and therefore implicate data for millions of individuals who are not putative class members. Google’s preservation obligation is not so broad as to compel it to put aside its obligations to respect users’ deletions and our data retention policies for data beyond what is strictly necessary to the litigation.

Beyond its compliance obligations, Google constantly strives to implement strong privacy protections that reflect additional guidance of data protection authorities. Suspending the ability of all U.S.-based users to control the data associated with their accounts would cause Google to run against its representations to users, and is inconsistent with Plaintiffs’ ostensible goal of preserving users’ privacy and control over their data. Similarly, Google maintains and processes data it receives through Google Analytics on behalf of the websites that use Google Analytics. Those websites, just like Google users, have the ability to set retention periods and delete data. Suspending the ability of all Analytics customers—whose websites may have been visited by users in private browsing mode—to delete data that Google stores on Analytics customers’ behalf is unduly burdensome, not proportional to the needs of the case and may be inconsistent with our contractual obligations.

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Google’s February 5, 2021 Ltr. to Plaintiffs’ Counsel

Google’s Proposal

To resolve this preservation dispute, Google is prepared to preserve data associated with each Plaintiff’s Google Account(s) as recorded in the Identity logs and produce information sufficient to show that the information at issue is not linked, and not reasonably linkable, to specific users.

* * * *

We look forward to continuing to work with Plaintiffs to address and resolve any issues related to discovery in this matter.

Sincerely,

QUINN EMANUEL URQUHART & SULLIVAN, LLP

/s/ Josef Ansorge
Josef Ansorge

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**Re: *Chasom Brown, et al., v. Google LLC*, Case No. 5:20-cv-03664-LHK
Google Custodians and Searches**

Dear Counsel,

I write as a follow up to our June 22 letter regarding custodians and searches.

As discussed, Plaintiffs have been reviewing the documents Google produced on June 18, for the first 17 custodians, to identify additional custodians and searches.

Based on that ongoing review, and in addition to the individuals we previously proposed, Plaintiffs have identified a number of other Google employees who should be included as document custodians in this case and certain additional relevant searches.

Included in this letter is a summary of the reasons why Google should include these additional custodians plus specific searches for each of those custodians. We also include in this


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1. **Alex Ainslie.** Already a custodian in *Calhoun*, documents produced by Google in this case establish that he should also be a custodian in this case. For example, Mr. Ainslie's name is the first name listed on the Q3 2019 "Privacy-Focused Chrome" presentation, which (among other things) discusses the possibility of blocking third-party cookies "by default" in Incognito mode "to measure impact" and the possibility of "[a]ligning users['] expectations of Incognito with what it [Incognito] actually does" such as by adding features such as [REDACTED]. GOOG-BRWN-00165067; *see also* GOOG-BRWN-00165068 (discussing how "'Guest Mode'/'Temporary Mode' doesn't imply anonymity towards websites, Google and ISP and seems more true to what Incognito does today."). This document also discusses the "promise" of anonymity with Incognito. GOOG-BRWN-00165177. Mr. Ainslie is also identified as one of the contributors for a "Chrome Browser: 2019+ Strategy" document, which notes Google's intent to "[a]ddress known problems of Incognito." GOOG-BRWN-00139753. In July 2020, Mr. Mardini sent an email to the Chrome Trust & Safety team announcing changes to Chrome with 3rd-party cookie-blocking in Incognito, and he identified Mr. Ainslie as part of the "Leadership" with that effort. GOOG-BRWN-00189933. In May 2020, Mr. Ainslie also referenced certain Incognito "histograms" (GOOG-BRWN-00233108) and the roll-out of [REDACTED]. GOOG-BRWN-00181901; *see also* GOOG-BRWN-00050100 (Mr. Ainslie comments on modifying Incognito to provide for "3rd party cook[ie] blocking" and considering impact on publishers). Mr. Ainslie was also involved in changes to the Incognito NTP (GOOG-BRWN-00392367) and sent an email titled "Incognito Imprecision" that was critical of Google's public statements regarding Incognito. GOOG-BRWN-00184110. Mr. Ainslie very clearly had (and likely still has) a key role in terms of Google's Incognito efforts, and [REDACTED] *included as a custodian.*



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Plaintiffs propose the following searches for Mr. Ainslie:

- Incognito¹
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- [REDACTED]
- Histogram!
- (third OR 3rd OR 3d) /3 cookie!
- [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED]

2. **Arne de Booj.** Mr. de Booj has direct personal involvement with Google projects and efforts focused on Incognito, control, transparency, consent, and other relevant issues. One document indicates, for example, that Mr. de Booj stated (correctly) that “[t]here does not seem to be a clear understanding of what incognito does to data collection and who can see what information.” GOOG-BRWN-00164006. Mr. de Booj also sent an email referencing [REDACTED] and asking whether “Chrome Incognito” was interested in “participating in a research immersion” to “learn about Incognito user needs & perceptions” where “consent” would be a topic. GOOG-BRWN-00182236. He also sent an email regarding the PDPO “privacy in context” efforts, focusing on “consent & transparency” and Google’s “transparency & control efforts.” GOOG-BRWN-00220475. He was identified as one of the “Owners” for a project focused on “consent patterns, including to assess user comprehension and user feedback to messaging.” GOOG-BRWN-00222188. Mr. de Booj was also included in discussions regarding Incognito users, including user consent and understanding. *See* GOOG-BRWN-00406075–76 (discussing “what we know about Incognito users” and noting that “Incognito mode is used by [REDACTED] of Chrome users, and [REDACTED] use it at least once per week” and that “[u]sers overestimate the protections that Incognito provides”); GOOG-BRWN-00246549 (discussing studies focused on Incognito but having participants “look at Incognito before asking about expectations for an UnAuth consent”); GOOG-BRWN-00059467 (noting that “incognito also has some overlap with UnAuth”); GOOG-BRWN-00176824, -00176828 (discussing research relating to signed-out users and users that do not use their Google Account and noting that “every incognito window gets a new zwieback”); GOOG-BRWN-00177213 (discussing research involving “incognito with a combined consent”).

Plaintiffs propose the following searches for Mr. de Booj:

- Incognito

¹ Please confirm that “Incognito” from prior searches would have captured “Incognito++.” Otherwise, Plaintiffs request to change the search term “Incognito” to “Incognito!”



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- inPrivate
- Private! /3 (brows! OR mode)
- Consent!
- Unauth! OR “signed out”
- [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED]
- Anonym! OR pseudonymous

3. **Benjamin Poiesz.** During the class period, in 2019, Mr. Poiesz sent an email proposing that Google change Incognito so that it would actually (as promised) “provide anonymity.” GOOG-BRWN-00403704. He has also proposed consideration of changing Google’s business model to a “[r]ev share back to users” based on their data. GOOG-BRWN-00405767. On February 12, 2021, Ane Aranzabal added Mr. Poiesz to an email exchange “for Incognito/PPN” in connection with a “Sundar presentation.” GOOG-BRWN-00220480. This document also discusses Google’s “transparency & control efforts” and the issue of “consent & transparency.” *Id.* Mr. Poiesz has also had a lead role with “PPN & Incognito” and efforts to “better understand rev impact.” GOOG-BRWN-00223134. In 2015, he was identified in connection with “Incognito-fest,” which focused on “the current state of Incognito and developing a shared understanding of where we are.” GOOG-BRWN-00184710. Based on these and other documents, Mr. Poiesz should be included as a custodian.

Plaintiffs propose the following searches for Mr. Poiesz:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- [REDACTED]
- [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED]
- rev! /3 (share OR impact)

4. **Breen Baker.** Mr. Baker has worked at Google since August 2011 as a Product Manager with Google Analytics.² Based on the documents Google produced for other custodians, it appears that Mr. Baker has in-depth knowledge about Google’s cross-device conversions and tracking. *See, e.g.,* GOOG-BRWN-00171370 (discussing Biscotti ID tying); GOOG-BRWN-00170140 (discussing linking of anonymous and user id). His documents are relevant in terms of

² <https://www.linkedin.com/in/breenbaker> [REDACTED]



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understanding Google's use of private browsing data in connection with various Google services and also potentially identifying class members.

Plaintiffs propose the following searches for Mr. Baker:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- Zw! OR biscotti OR cookie!
- conver! OR track!
- Anonym! OR pseudonymous OR unauth!

5. **Brad Townsend.** Already a custodian in *Calhoun*, Mr. Townsend appears to have deep and unique knowledge about Google's collection and tracking of data. For example, in an internal discussion, Dan Stone asks "what tests do we have to ensure that we don't accidentally set/collect the GA 1P cookies when analytics consent is disabled" and then defers that question to Mr. Townsend. GOOG-BRWN-00236984. Mr. Townsend then provided an explanation on how Google's "consent controls are focused on client storage, and we enforce that GA cookies are not read/written client side in the tagging code." *Id.* In a document called "Conversion Tracking in Firefox Private Browsing Mode," Google explains how Firefox's Private Browsing Mode blocks third-party cookies and "most background tracking pings," and therefore breaks Google's "conversion tracking and remarketing collection." GOOG-BRWN-0027314. The study's objective was to "[e]nable conversion tracking on Firefox in Private Browsing mode through a client side fix." *Id.* Mr. Townsend appears throughout the document as someone with knowledge about how to implement that study. See GOOG-BRWN-00027320–22.

Plaintiffs propose the following searches for Mr. Townsend:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- Firefox
- Zw! OR biscotti OR cookie!
- conver! OR track! OR remarket!
- Anonym! OR pseudonymous OR unauth!
- consent!

6. **Chetna Bindra.** Already a custodian in *Calhoun*, Ms. Bindra appears to have unique knowledge about Google's blocking of cookies and use of pseudonymous IDs. For example, she was involved in the launch of [REDACTED] Google's feature that "will start



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blocking third-party cookies in Incognito mode by default.” GOOG-BRWN-00173274–77. *See also* GOOG-BRWN-00062399 (discussing meeting with Ms. Bindra regarding [REDACTED] and “what mocks we can provide for the upcoming Sundar review,” and noting “concern” that Ms. Bindra shared a deck that “promises fundamental changes to Chrome’s Incognito mode”); GOOG-BRWN-00171653 (discussing “Ramp-up Plan for [REDACTED]”). In one Google document, Ms. Bindra expressed concern over a Google statement regarding how “user data associated with pseudonymous ID can be shared with advertising platforms while browsing the web, including which web pages are being visited,” which she described as “going to cause a firestorm.” GOOG-BRWN-00175635. She likely has documents relevant to Google’s tracking and cookie blocking efforts, including with Incognito.

Plaintiffs propose the following searches for Ms. Bindra:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- Zw! OR biscotti OR cookie!
- Anonym! OR pseudonymous OR unauth!
- [REDACTED]

7. **Chris Palmer.** Mr. Palmer appears to have unique knowledge about user confusion regarding Incognito mode. Mr. Palmer’s name appears on the first page of a Google presentation titled “The Incognito Problem” that begins with the “key fact” that “Incognito confuses people” and then proposes solutions, such as “improv[ing] Incognito such that it provides more of what people (both mistakenly, and correctly) expect it does.” GOOG-BRWN-00140297–99, -00140316. In one internal email, Mr. Palmer notes that “[t]he phrase ‘Browse without a trail of cookie crumbs’ makes it sound like maybe Incognito doesn’t support cookies at all, or that it somehow exerts a Do not Track-like behavior on servers,” and is “all so imprecise.” GOOG-BRWN-00184109. Mr. Palmer advocated that Google should “abandon the Incognito name” because “[i]t’s not clear enough.” GOOG-BRWN-00167338. He noted that “I’ve already made my case (for 5 years now)” about this issue. *Id.*

Plaintiffs propose the following searches for Mr. Palmer:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- (User! OR people) /10 confus!
- Track!– [REDACTED]



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- Cookie!

8. **David Monsees.** Already a custodian in *Calhoun*, the documents produced by Google establish that he should also be a custodian in this case. Not only did Google identify Mr. Monsees as its corporate representative regarding Google data logs in *Calhoun*, with many documents tied to him regarding those logs, he has been involved with various aspect of Incognito. For example, Sammit Adhya included him on an email regarding the June 2019 “Incognito Product Workshop” (GOOG-BRWN-00177764), and Mr. Monsees was identified as someone Rory McClelland should meet as the “PM lead for Footprints and very actively involved in Google’s overall privacy conversations.” GOOG-BRWN-00165704. Mr. Monsees also attended presentations and received emails relating to Sin Rastro and Incognito. GOOG-BRWN-00176982. In July 2020, Mr. Mardini sent an email to the Chrome Trust & Safety team announcing changes to Chrome with 3rd-party cookie-blocking in Incognito, and he identified Mr. Monsees as part of the team contributing to those Chrome-related efforts. GOOG-BRWN-00189933. In December 2020, Mr. Monsees was identified as one of the “Incognito PM Leads” and seeking information about “what it might mean to honor a user’s explicit request for privacy when they turn on Incognito mode.” GOOG-BRWN-00246045.

Plaintiffs propose the following searches for Mr. Monsees:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- [REDACTED]
- [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED]
- [REDACTED]
- “Sin Rastro”
- (user! OR people) /10 (privacy OR consent!)

9. **Deepak Ravichandran.** Already a custodian in *Calhoun*, the documents produced by Google establish that he should also be a custodian in this case. Mr. Ravichandran is Google’s principal engineer for Google Display Ads. He co-authored Google’s 2019 study on the effect of disabling third-party cookies on publisher revenue. GOOG-BRWN-00048286. This is an August 2019 public study where Google acknowledged that disabling third-party cookies would decrease publishers’ revenue by 52% average and 64% median—a serious threat to Google. Plaintiffs are entitled to documents relied on for that study and any communications Google employees and authors of competing studies that Mr. Ravichandran admittedly sought to contact. In another custodian’s production, one email from Mr. Ravichandran is captured referencing revenue impacts from third-party cookie blocking. GOOG-BRWN-00173681. This email pre-dates the May to August 2019 timeframe of that study. Plaintiffs served discovery requests for such documents (RFP Nos. 154, 155), wrote two letters to Google, and notified Google to



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explain the relevance and engage in any reasonable narrowing of the scope of documents sought, but Google has refused any production. Mr. Ravichandran is a senior Google employee for Google Display Ads and intimately involved in Google's determination of the impact blocking third party cookies would have on revenue.

Plaintiffs propose the following searches for Mr. Ravichandran:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- study AND (impact OR revenue OR sustain* OR advertis* OR publish*)
- [REDACTED]
- nitish OR korula
- turtledove
- Zw! OR biscotti OR cookie!
- (user AND profile) AND (publish! OR remarket! OR rmktg)

10. **Dmitry Titov.** Mr. Titov is an Engineering Manager at Google with responsibilities tied to Chrome.³ Mr. Titov's documents are relevant in terms of understanding the development and history of Chrome and Google's data collection. *See, e.g.*, GOOG-BRWN-00109561 (discussion about Incognito profiles being passed to regular browsing mode); GOOG-BRWN-00130258 (changes to whitelists and functions capturing Incognito activity); GOOG-BRWN-00183781 (tracking system-level events while Incognito logged in UMA). Also, Mr. Titov was involved in discussions concerning the representations made in the Chrome Incognito splash screen and revisions detailing whether "private" was an appropriate representation. GOOG-BRWN-00131133. Further, Mr. Titov attended a 2017 Chrome Summit to discuss forthcoming changes to Chrome, including Incognito functions. GOOG-BRWN-00064645-48. Plaintiffs propose the following searches for Mr. Titov:

Plaintiffs propose the following searches for Mr. Titov:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- Zw! OR Biscotti OR cookie!

³ <https://www.linkedin.com/in/dmitrytitov/> [REDACTED]



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- Anonym! OR pseudonymous OR unauth!
- Consent!
- Profile AND brows!
- UMA
- “Chrome Summit”

11. **Florian Uunk.** Mr. Uunk has been a software Engineer at Google since June 2012,⁴ and he appears to have unique knowledge regarding Incognito and the use of cookies in Incognito mode and other Incognito-related issues. For example, he managed projects involving third party cookie blocking in Incognito. GOOG-BRWN-00182804; *see also* GOOG-BRWN-00199591 (reviewing and approving changes regarding user control cookie blocking). In an internal discussion, Mr. Uunk “argue[s] against porting cookies across modes” because it “would be bad for privacy, and negatively surprising in many cases (why do I have stuff in my cart if I go incognito?, why is the stuff that I put in my cart in incognito mode there in regular mode?).” GOOG-BRWN-00183724. In June 2019, Mr. Uunk was chosen to “lead the development of Chrome Privacy features” such as “[redacted] and rethinking Incognito mode.” GOOG-BRWN-00167716. He has also been involved with reading Google histograms to analyze cases where the X-Client-Data header is not sent to Chrome, which includes when “[t]he user is in incognito mode.” GOOG-BRWN-00233093. Those efforts, including [redacted], are highly relevant in this case, and Mr. Uunk should be a custodian.

Plaintiffs propose the following searches for Mr. Uunk:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- Zw! OR biscotti OR cookie!
- Anonym! OR pseudonymous OR unauth!
- [redacted]
- [redacted] OR [redacted] OR [redacted] OR [redacted] OR [redacted]

12. **Haskell Garon.** Mr. Garon is a Senior Product Manager for Google Cloud. GOOG-BRWN-00023916. According to his LinkedIn, he formerly served as the Senior Product

⁴ <https://de.linkedin.com/in/feuunk> [redacted]



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Manager for Sellside Ad Platforms.⁵ Mr. Garon also spent six years managing a team of Product Managers responsible for the roadmap and strategy for third-party monetization of Google's publisher partners on Ad Manager, AdMob, and AdSense in Google's real-time ad exchange. Internal documents reflect that Mr. Garon has knowledge about Google's internal business process and monetization strategies. GOOG-BRWN-00242521. Mr. Garon's documents are relevant in terms of understanding Google's monetization of private browsing information.

Plaintiffs propose the following searches for Mr. Garon:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- (user OR data OR brows!) /25 (monetiz! OR profit! OR revenue)
- [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED]

13. **Hyewon Jun.** Already a custodian in *Calhoun*, the documents produced by Google establish that Ms. Jun should also be a custodian in this case. For example, Ms. Jun has extensive discussions with Google employees regarding restrictions of Google's competitor's browsers like Mozilla Firefox and Microsoft Edge, and how their cookie blocking mechanisms would impact Google's advertising technologies and the substantial revenue Google derived (and continues to derive) from those technologies. GOOG-BRWN-000175565, GOOG-BRWN-00175673–75, GOOG-BRWN-00175744–45. Ms. Jun also was involved in discussions concerning Google's efforts to substitute its tracking technologies from cookies to pixels, and associated those cookie-less technologies with Google's existing user libraries. GOOG-BRWN-00173685; *see also* GOOG-BRWN-00175745. Ms. Jun was (and likely still is) very involved with Google's efforts to determine impacts on its revenue from industry-wide changes to cookie blocking before Google ever launched its own efforts, how to overcome those cookie blocking efforts via the use of cookie-less technologies, and how Chrome could enable those technologies, all of which ties into Google's efforts to continue tracking and monetizing the private browsing of Plaintiffs and putative class members in this case.

Plaintiffs propose the following searches for Ms. Hyewon:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)

⁵ <https://www.linkedin.com/in/haskellgaron/> [REDACTED]



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- block! AND (impact! OR revenue! OR sustain! OR advertis! OR Mozilla OR Firefox OR Microsoft OR Edge)
- browser AND restrict* AND cookie!
- [REDACTED] OR [REDACTED] OR [REDACTED]
- Zw! OR biscotti OR cookie!
- PPID OR [REDACTED]
- [REDACTED] OR [REDACTED] OR [REDACTED] or [REDACTED] OR [REDACTED]

14. **Lorraine Twohill.** One document identifies Ms. Twohill as a member of a Google “privacy council” and includes her recommendation to “Make Incognito mode truly private,” such as by “turning cookie blocking on by default” and “adding cautionary language at moments like 3P sign-in.” GOOG-BRWN-00406067. She continued: “We are limited in how strongly we can market Incognito because *it’s not truly private*, thus requiring really fuzzy, hedging language that is almost more damaging.” *Id.* (emphasis added). She is also identified as responsible for “Privacy settings” at Google, with the goal to “improve the user experience” and increase “interactions with settings to achieve goals and/or better understand settings.” GOOG-BRWN-00210410; *see also* GOOG-BRWN-00203816 (identifying Ms. Twohill as one “Owner” of effort to making “Google’s approach to privacy clear”). Ms. Twohill is also apparently involved with [REDACTED] with Google acknowledging that “[i]t is no surprise that our users can’t explain what a Google Account is or what it would hold, if it can’t be seen OR is represented schizophrenically as is the case in many of our products today.” GOOG-BRWN-00155368. Despite other documents recognizing that Incognito is not private, this document references Incognito as part of Google’s “privacy controls” for users. *Id.* She was also identified as one of two owners of a “first meeting” with Mr. Pichai with “Incognito mode being one of the topics.” GOOG-BRWN-00184645; *see also* GOOG-BRWN-00185344 (“We’ve received feedback from Sundar and Lorraine that they’d like us to push to have a new Incognito icon ready for the IO announcement”). Ms. Twohill also sent a report on how Google “aggressively promoted Chrome” including demonstrating “Chrome’s incognito mode.” GOOG-BRWN-00229060–61. According to an April 2020 email concerning rebranding Incognito, that effort was “driven by Lorraine [Twohill] who told the PDPO steering committee that Incognito might need rebranding” while Mr. Pichai “didn’t want to put incognito under the spotlight.” GOOG-BRWN-00183088; *see also* GOOG-BRWN-00395008 (“We’ve received feedback from Sundar and Lorraine that they’d like us to push to have a new Incognito icon ready for the IO announcement.”). In May 2020, Ms. Twohill participated in a meeting concerning Incognito mode and “addressed the debate on naming.” GOOG-BRWN-00224176; *see also* GOOG-BRWN-00222952 (“Incognito: Teams in Chrome, Maps, YouTube, and Search have been working with Lorraine’s team and the PDPO on making incognito a more accessible and meaningful part of our privacy foundation”); GOOG-BRWN-00220453 (email concerning Incognito disclosures, with Google employee stating that draft was “overpromising for Chrome’s incognito mode” where also a copy “being reviewed with ... Loarraine”).

[REDACTED]



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Plaintiffs propose the following searches for Ms. Twohill:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- Block! /5 cookie!
- [REDACTED]
- [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED]

15. **Michael Kleber.** Already a custodian in *Calhoun*, the documents produced by Google establish that he should also be a custodian in this case. Mr. Kleber has been a software engineer at Google since 2007. He has communicated with Google employees about identification of Incognito sessions. GOOG-BRWN-00173637. Mr. Kleber is frequently tagged for discussions concerning Google's project [REDACTED] discussing cookie blocking, which is highly relevant in terms of understanding Google's Incognito-focused considerations and changes. GOOG-BRWN-00173305-06; GOOG-BRWN-00199741. Mr. Kleber was also designated as a speaker at Google's 2020 "Tagging Summit," specifically speaking about "The Future of Privacy." GOOG-BRWN-00174567. Further, Mr. Kleber was assigned projects concerning tagging for ad-conversion tracking. GOOG-BRWN-00144542. Mr. Kleber is also very familiar with tracking technologies, acknowledging "there are roughly zero non-Google companies whose tracking depends *only* on [third party] cookies," GOOG-BRWN-00183151, which demonstrates Mr. Kleber's knowledge concerning what other tracking technologies are used to identify individual across the internet.

Plaintiffs propose the following searches for Mr. Kleber:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- Zw! OR biscotti OR cookie!
- Anonym! OR pseudonymous OR unauth!
- Ad! AND conver! AND track!
- Chrome AND conver! AND measure!
- [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED]

16. **Mike Pinkerton.** Mr. Pinkerton is a Senior Staff Software Engineer. GOOG-BRWN-00023911. "In 2018 Pink's team launched version 69 of Chrome iOS as part of the

[REDACTED]



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Chrome 10th Anniversary.”⁶ He has been involved in a Google project aiming to “resolve user misconceptions about what incognito mode offers and what id [sic] does not.” GOOG-BRWN-00181405. In one project regarding user “confusion” about “how to leave incognito,” Mr. Pinkerton suggested that Google instruct users that “[t]o leave incognito, swipe left.” GOOG-BRWN-00181584. He has also discussed how “Dark Mode” may have caused the “increase in Incognito usage.” GOOG-BRWN-00181580. In one document involving the “Chrome 2020 iOS Strategy – iOS Squad,” Mr. Pinkerton asked if “improved settings” are “on our 2020 roadmap” in response to a comment that Google “[i]nvest in a safe and private browsing experience for users (3d party cookie controls, Safe Browsing, improved privacy settings).” GOOG-BRWN-00182207. He has been involved in discussions concerning the development of Google’s toggle that purports to block third-party cookies during Incognito sessions. GOOG-BRWN-00182266. Mr. Pinkerton likely has relevant documents helpful to understanding users’ perceptions of Incognito mode and the development of [REDACTED].

Plaintiffs propose the following searches for Mr. Pinkerton:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- [REDACTED]

17. **Nitish Korula:** Mr. Korula is Google’s Senior Staff Research Scientist for Google Ad Manager. He co-authored Google’s 2019 study on the effect of disabling third-party cookies on publisher revenue. GOOG-BRWN-00048286. This is an August 2019 public study where Google acknowledged that disabling third-party cookies would decrease publishers’ revenue by 52% average and 64% median—a serious threat to Google. Plaintiffs are entitled to documents relied on for that study and any communications Google employees and authors of competing studies that Mr. Korula admittedly sought to contact. GOOG-BRWN-00048288. In another custodian’s production, one email from Mr. Ravichandran—who was the other co-author of this study—is captured referencing revenue impacts from third-party cookie blocking. GOOG-BRWN-00173681. This email pre-dates the May to August 2019 timeframe of that study. Plaintiffs served discovery requests for such documents (RFP Nos. 154, 155), wrote two letters to Google, and have met and conferred with Google to explain the relevance and engage in any reasonable narrowing of the scope of documents sought, but Google has refused any production. Mr. Korula was also involved in two discussions about Google’s cryptic [REDACTED]. GOOG-BRWN-[REDACTED].

⁶ https://en.linkfang.org/wiki/Mike_Pinkerton [REDACTED]



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00171920; GOOG-BRWN-00171947. Mr. Korula is a senior Google employee for Google Ad Manager and is involved in Google's determination of the impact blocking third party cookies would have on revenue, and also building user profiles.

Plaintiffs propose the following searches for Mr. Korula:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- Zw! OR biscotti OR cookie!
- study AND (impact OR revenue OR sustain* OR advertis* OR publish*)
- [REDACTED]
- [REDACTED]
- deepak OR ravichandran
- (user AND profile) AND (publish! OR remarket! OR rmktg)

18. **Othar Hansson.** Mr. Hansson appears to have a core role in Google's Privacy & Data Protection Office with personal involvement in numerous relevant Incognito-related projects and discussions. For example, in one email exchange, Mr. Hansson was questioned about Incognito, and he referenced certain "Incognito logs" kept by Google. GOOG-BRWN-00403751. Another Google employee responded: "The inconsistencies around incognito – to the point that even old-school Googlers often get them wrong are baffling to normal people." *Id.* He is also identified as one of the authors of "Data Transparency I/O Moment" that begins with the acknowledgement that "users do not have a clean mental model for the data that collects about them and how this data *is or is not* used across our products." GOOG-BRWN-00204424. That document identifies Incognito as "likely a billion-user product." On February 12, 2021, Ane Aranzabal added Mr. Hansson to an email exchange "for Incognito/PPN" in connection with a "Sundar presentation." GOOG-BRWN-00220480. This document also discusses Google's "transparency & control efforts" and the issue of "consent & transparency." GOOG-BRWN-00220475. In an email regarding the "Incognito definition," Mr. Hansson commented how "having a simple cross-Google mental model [for Incognito] has value to our users . . . but it's been hard to fully align existing product behavior into a more consistent state," also adding that "[i]t's definitely a bad experience resulting from lack of consistency across our products." GOOG-BRWN-00403753–53. Another document identifies Mr. Hansson as a co-lead of the "Strategic Programs" in Google's Privacy & Data Protection Office. GOOG-BRWN-00071584. Mr. Hansson has also had discussions regarding Google's ability "to distinguish between Incognito and non-Incognito sessions." GOOG-BRWN-00176433. Given his role and these and other documents, Mr. Hansson should be a custodian.

Plaintiffs propose the following searches for Mr. Hansson:

[REDACTED]



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- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- [REDACTED]
- (user OR user's OR users OR data) /5 (transparen! OR control! OR consent!)
- [REDACTED] OR [REDACTED] OR [REDACTED] or [REDACTED] OR [REDACTED]

19. **Qi Dong.** Mr. Dong is a Software Engineer at Google. GOOG-BRWN-00023915. According to his LinkedIn, he worked as an Adwords Statistician for Google from June 2011 to November 2012.⁷ He focused on business analytics, products analytics, modeling, A/B testing and market research. Internal documents demonstrate that Mr. Dong has an expertise in display Ad publication strategies in the context of phasing out third party cookies. GOOG-BRWN-00173430. Internal documents also refer to Mr. Dong as a lead engineer on projects relating to Chrome. GOOG-BRWN-00161318. Mr. Dong likely has relevant documents concerning the technical aspects of Google's collection of private browsing information.

Plaintiffs propose the following searches for Mr. Dong:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- Zw! OR biscotti OR cookie!
- Anonym! OR pseudonymous OR unauth!

20. **Ramin Halavati.** Mr. Halavati has been a Senior Software Engineer at Google since August 2016,⁸ and has been dubbed the "Incognito expert." GOOG-BRWN-00182637. He has been involved, for example, in projects monitoring Incognito users. In one project involving the collection of "granular incognito usage states," Mr. Halavati agreed to consider metrics he described as "borderline," including the "[u]sage of Google products" and other data. GOOG-BRWN-0018539-10. In another project, Mr. Halavati described how "experiment data" was "a means of connecting regular and incognito sessions," and noted that "having more people in the experiment arms reduces the uniqueness of these users." GOOG-BRWN-00168793. Mr.

⁷ <https://www.linkedin.com/in/ilhyvmvm/>

⁸ <https://de.linkedin.com/in/ramin-halavati-81623b2b> [REDACTED]



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Halavati's documents are relevant in terms of understanding Google's collection and use of private browsing information from putative class members.

Plaintiffs propose the following searches for Mr. Halavati:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- (user OR user's OR users OR data) /s (monitor OR dashboard OR metric!)

21. **Rory McClelland.** Mr. McClelland appears to have been deeply involved with the Google [REDACTED] efforts, among other projects. In April 2020, he sent an email to Parisa Tabriz, Alex Ainslie, and Margaret Schmidt with a "roll-out plan for [REDACTED] which was "the new feature in Incognito mode that will block third-party cookies by default." GOOG-BRWN-00181901-02. He is the one who wrote that [REDACTED]

[REDACTED] and that the "project impact is [REDACTED]" (later corrected to [REDACTED]). *Id.* One email identifies Mr. McClelland as one of two "incognito experts." GOOG-BRWN-00182141. He was also involved with discussions regarding "enhanced incognito" with "strong anti-tracking enhancements" (GOOG-BRWN-00388456) and identified as one of two Chrome representatives for the June 2019 "Incognito Product Workshop" (GOOG-BRWN-00177764). In 2018, Mr. McClelland was told that he should "[o]wn Chrome's Incognito" and "determine how it should evolve in light of things like GDPR/ITP/etc." GOOG-BRWN-00165702.

Plaintiffs propose the following searches for Mr. McClelland:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- (third OR 3rd OR 3d) /3 [REDACTED]
- [REDACTED] OR [REDACTED] OR [REDACTED] or [REDACTED] OR [REDACTED]
- track! OR antitrack! OR anti-track!

22. **Sree Pothana.** During his deposition, Glenn Bernston identified Sree Pothana as the person from Google Analytics he interviewed to prepare for the deposition. Bernston Tr. 331:17-331:23. In addition to his experience and knowledge with respect to Google Analytics, Mr. Pothana also appears to have in-depth knowledge about Google's use of identifiers (*e.g.*, GOOG-BRWN-00141411) and Google's logging practices (*e.g.*, GOOG-BRWN-00170877). In an internal document authored by Mr. Pothana, he describes the "[g]oal" of a project as [REDACTED]



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GOOG-BRWN-00141411. In a discussion about “Analytics Data Association,” Mr. Pothana states: [REDACTED] to mitigate the risk, but the risk is still there.” GOOG-BRWN-00170877. These are key issues in this case, and Mr. Pothana’s documents should be produced.

Plaintiffs propose the following searches for Mr. Pothana:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- Identifier! OR “user ID” OR gaia!
- Zw! OR biscotti OR cookie!
- Log! OR plog!
- Anonym! OR pseudonymous OR unauth!

23. **Steve Hamilton.** Mr. Hamilton is a UXR leading efforts focused on Incognito, including efforts focused on “what we know about Incognito users, what they use it for, and some of the risks we’ve identified.” GOOG-BRWN-00406075. That research is relevant in terms of class member identification, liability, and damages, with Mr. Hamilton noting “Incognito mode is used by [REDACTED] of Chrome users” and that “[u]sers overestimate the protections that Incognito provides.” GOOG-BRWN-00406075-76. Mr. Hamilton identified as one of the “Core Team Members” for Sin Rastro focused on “Incognito Research.” GOOG-BRWN-00148736. His name appears on the first page of an internal Google presentation titled “User Needs & Misconceptions Incognito Mode (IM) Across Google.” GOOG-BRWN-00165706. Another email references an “Incognito Misconceptions survey report” from Mr. Hamilton noting “significant confusion” tied to Incognito. GOOG-BRWN-00392406. Mr. Hamilton should be included as a custodian.

Plaintiffs propose the following searches for Mr. Hamilton:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- [REDACTED]
- [REDACTED] OR [REDACTED] OR [REDACTED] or [REDACTED] OR [REDACTED]

24. **Tim Hsieh.** Mr. Hsieh is a Senior Software Engineer at Google who worked on DoubleClick Ad Exchange and Cookie Matcher. Mr. Hsieh helped DoubleClick Ad Exchange connect publishers and advertisers together. [REDACTED] designed, implemented, and launched [REDACTED]



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frameworks to ensure Cookie Matcher complies with various privacy regulations (*e.g.*, GDPR, CCPA, LGPD, and so on). Mr. Hsieh directed Google's efforts to comply with the CCPA and created policy regarding cookies in post-CCPA California. GOOG-BRWN-00245397; GOOG-BRWN-00245558. Mr. Hsieh likely has relevant documents concerning Google's compliance with privacy regulations, which would include compliance regarding the interception and data collection at issue in this case.

Plaintiffs propose the following searches for Mr. Hsieh:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- Cookie! OR DoubleClick
- CCPA OR (privacy /5 (law! OR regulation!))

25. **Vivek Sekhar.** Mr. Sekhar appears to be the lead Product Manager for Google's [REDACTED] project. GOOG-BRWN-00178147. Google characterizes this project as its [REDACTED] starting "by the end of 2020," GOOG-BRWN-00221769. Mr. Sekhar likely has highly relevant and unique documents concerning Google's [REDACTED] project.

Plaintiffs propose the following searches for Mr. Sekhar:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- (third OR 3rd OR 3d) /3 cookie!
- [REDACTED]
- [REDACTED] OR [REDACTED] OR [REDACTED] or [REDACTED] OR [REDACTED]

II. Previously Proposed Custodians

In the interest of compromise, Plaintiffs are willing to drop Jian Qiao as a custodian, provided that Google agree to add the following individuals we previously proposed. We have included additional information and ask that Google reconsider its position.

1. **Benj Azose.** Mr. Azose has worked at Google since 2008, and he currently manages the Product Analyst team for Google Chrome that (according to his LinkedIn profile) is [REDACTED]



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“[f]ocused on understanding Chrome users, improving Chrome’s launch process, defining Chrome’s guiding metrics and reporting on changes in key performance indicators inside and outside of Chrome.” Documents produced by Google show that Mr. Azose has been involved with relevant counting metrics tied to Chrome, with its [REDACTED] reporting system and where Chrome (at least for a time) [REDACTED]

[REDACTED] GOOG-BRWN-00168232. In July 2020, after this lawsuit was filed, there was a discussion involving Mr. Azose about “moving this data to UMA and removing it from [REDACTED].” *Id.* Mr. Azose identified himself as “the analyst decision maker on this.” *Id.* The exchange further discusses “Chrome sending stable IDs to Google domains” that “might allow Google to tie browsing sessions together – without any other technologies such as cookies or users signing in.” *Id.* These are all key issues tied to our ongoing disputes. Mr. Azose also likely has records focused on Incognito metrics. For example, in January 2020, he sent an email containing a report on “Clank users” with a “graph” showing users who “use incognito heavily.” GOOG-BRWN-00233853. In December 2019, he was told that Chrome was “not allowed to launch anything that negatively impacts revenue” and asked for help develop “proxies for revenue” and identifying Incognito as one of the “gaps” in the “ability to measure revenue impact.” GOOG-BRWN-00169228-29. Ms. Azose’s name also appears on the first page of a “chrome staples” presentation containing “[REDACTED]” and “[REDACTED]” noting a process to “log Omnibox in Incognito.” GOOG-BRWN-00048504; GOOG-BRWN-00048512; GOOG-BRWN-00048517. Mr. Azose also appears to have been involved with discussions regarding “changes in feature use” by Chrome users, including with “Incognito” (GOOG-BRWN-00233473), how websites can “detect being in Incognito” (GOOG-BRWN-00169103; *see also* GOOG-BRWN-00182136), certain Incognito “histograms” (GOOG-BRWN-00233108), how “the X-Client-Data header is currently not sent in Chrome” when the “user is in incognito mode” (GOOG-BRWN-00233093), and how [REDACTED] [REDACTED]” with other “incognito usage stats” (GOOG-BRWN-00233072). In connection with ChromeGuard, Mr. Azose was also asked for “data to measure/estimate incognito traffic in Chrome” (GOOG-BRWN-00233078). Mr. Azose’s key role in evaluating those metrics and revenue impacts, including with Incognito, establish a basis to include him as a custodian.

Plaintiffs propose the following searches for Mr. Azose:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- [REDACTED] OR UMA
- “Identifier! OR UID
- “opt out” OR “opt-out”
- [REDACTED]
- (tie OR tying OR link!) /5 (brows! OR session!) [REDACTED]



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- [REDACTED] OR [REDACTED] OR [REDACTED] or [REDACTED] OR [REDACTED]

2. **Nina Ilieva.** As mentioned in our May 21 letter, Ms. Ilieva has been involved with developing Google infrastructures to manage user identity in the ads space, which is relevant to the issue of how Google tracks users' private browsing. For example, according to internal Google documents, Google asked employees to "update our public facing documents that discuss cookies" as "part of our consent improvements for signed out users." GOOG-BRWN-00176119. Ms. Ilieva seems to have been involved with this Google project, which aims to improve "key things," including "help[ing] users understand abstract construct of 'cookies' and how they work." GOOG-BRWN-00176120. She noted that the Ads team was "doing a reclassification of their cookies." GOOG-BRWN-00176119. Google initially refused to make her a custodian (in part) because Ms. Ilieva reported to Greg Fair, a current custodian in this case. *See* Google's May 19 letter. But Google recently clarified that Ms. Ilieva "no longer reports to Mr. Fair." *See* Google's June 21 Letter. Ms. Ilieva likely possesses unique documents concerning user consent in the context of signed out users and should be made a custodian.

Plaintiffs propose the following searches for Ms. Ilieva:

- Incognito
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- Consent!
- Cookie!

3. **Sammit Adhya.** Mr. Adhya appears to have unique knowledge about Google's efforts and users' privacy expectations when it comes to Incognito mode. For example, following "user studies on unauth [sic] transparency/controls," he explained that "part of the challenge we face with both Android and Chrome is the definition of incognito." GOOG-BRWN-00222150. He noted that it "seems clear that users don't have a good sense of identity management," that "[e]ven the most basic questions around sign-in/sign-out state are completely misunderstood," and that "[u]sers have no idea . . . what is happening in their current state in terms of data collection." *Id.* He also asked if Google was "willing to trade data/revenue for user trust and brand reputation," and "[h]ow we want to define incognito/private browsing," including whether Incognito mode is "purely for local privacy" or for "privacy from Google." *Id.* In another internal discussion, Mr. Adhya explained how Google wanted to convey the message to users that if they "want to prevent Google from collecting data," they should be "one step away from that in *any* of our products by using Incognito." GOOG-BRWN-00177525. Mr. Adhya also espoused strong beliefs that Google should simplify, not complicate, its privacy controls, stating users should not require a "cognitive load" to understand and operate those controls. *Id.* Mr. Adhya also acknowledged that there are misconceptions with Incognito and Google should clarify [REDACTED]. And



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in a different internal discussion, Mr. Adhya noted a “search detecting Incognito” issue and remarked, “yikes, doubled down on a promise we don[’t] keep.” GOOG-BRWN-00176480. Mr. Adhya was also involved with discussions about whether Incognito activity is saved in a user’s Google Account. GOOG-BRWN-00212393. Although Mr. Adhya is not a member of Google’s [REDACTED] group/project, he was often encouraged to contact [REDACTED] team members to better understand the project and coordinate. GOOG-BRWN-00177701, GOOG-BRWN-00178147. Further, Mr. Adhya was involved in ChromeGuard and third-party cookie blocking discussions with other internal Google groups. GOOG-BRWN-00177626, GOOG-BRWN-00177764, GOOG-BRWN-00182715.

Plaintiffs propose the following searches for Mr. Adhya:

- Incognito!
- inPrivate
- Private! /3 (brows! OR mode)
- User! /15 (study OR studies OR understand! OR confuse!)
- “Identity management”
- “Sin Rastro” AND (fail* OR review* OR analy*)
- [REDACTED]
- (third OR 3rd OR 3d) /3 cookie*
- Zw* OR Biscotti OR pseudo*
- ePrivacy
- consent* /3 ready
- “summer moment”
- account /3 particle
- [REDACTED] OR [REDACTED] OR [REDACTED] or [REDACTED] OR [REDACTED]

4. **Suneeti Shah Vakharia.** Ms. Vakharia appears to have knowledge about important issues of user consent. She has been involved in developing “plans to improve our signed out user consent” and projects involving Incognito mode like Sin Rastro. GOOG-BRWN-00176804. She has also been tasked with “[p]roviding new users with critical privacy choices during account creation to understand and control the information they share with Google when signed in or when signed out.” GOOG-BRWN-00204666. Ms. Vakharia likely has documents relevant to user consent, an important issue in this case.

Plaintiffs propose the following searches for Ms. Vakharia:

- Incognito!
- inPrivate
- Private! /3 (brows! OR mode) [REDACTED]



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- OTR OR (off /3 record)
- “Sin Rastro”
- User! /15 (understand! OR confuse!)
- Consent!

5. **Richard Jui-Chieh Hsu.**⁹ Mr. Hsu appears as the main engineer in Google’s [REDACTED] a [REDACTED] related project. GOOG-BRWN-001521201. That project [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] GOOG-BRWN-00152203. Given his engineering role in this Incognito-related project, Mr. Hsu likely has unique and highly relevant documents.

Plaintiffs propose the following searches for Mr. Hsu:

- Incognito!
- inPrivate
- Private! /3 (brows! OR mode)
- OTR OR (off /3 record)
- Zw! OR biscotti OR cookie!
- [REDACTED]

III. PWG Custodians

Aside from the three individuals Google identified, see Google’s June 25 email, we still have not received information about who is part of Google’s Privacy Working Group, including without limitation the Chrome PWG. Please provide that as soon as possible.

IV. Google-Selected and Agreed-To Custodians

Based on our review of Google’s June 18 production, it has become apparent that there are some additional searches needed to identify relevant documents that should be produced. Plaintiffs propose that Google run the following additional searches for the ten Google-Selected

⁹ It’s not clear if “Richard Hsu” (identified in Mr. Bernston’s deposition, see Bernston Tr. at 260:1–260:24) and “Richard Jui-Chieh Hsu” are the same person, based on Google’s June 21 letter, which refused to add Mr. Hsu as a custodian but did not mention whether he is or is not currently employed by Google. Please clarify. [REDACTED]



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Custodians—Glenn Bernston, Deepti Bhatnagar, Sabine Borsay, Greg Fair, Helen Harris, Abdelkarim Mardini, Justin Schuh, Dan Stone, Alexei Svitkine, and Keith Wright, and also to the four agreed-to custodians—Adrienne Porter Felt, Sam Heft-Luthy, Russ Ketchum, and Chris Liao.¹⁰

No.	Search Term	Basis for Adding
1	Eprivacy OR (consent! /3 ready) OR consentless	This search is likely to hit on relevant documents concerning Google's efforts to "move to a consentless ready incognito." GOOG-BRWN-00176943.
2	(summer OR privacy) /2 moment	Google's Summer Privacy Moment was "comprised of privacy and security product announcements," which "[l]anded neutral to positive press coverage across major outlets globally." GOOG-BRWN-00154766. One of Summer Privacy Moment's objectives was to "[s]trengthen Google's position as an industry leader when it comes to data privacy," and included messages on how Google "keep[s] your information private" by providing "[e]asier access to Incognito mode." GOOG-BRWN-00154767; GOOG-BRWN-00154768.
3	[REDACTED] [REDACTED]	This search is likely to hit on relevant documents concerning Google's "third party cookie blocking feature in Incognito mode." GOOG-BRWN-00042435.
4	GWS /10 (ID OR identif!)	This search is likely to hit on relevant documents relating to Google's GWS ID, which is used to identify Incognito browsing. GOOG-BRWN-00168636.

¹⁰ Regarding the four agreed-to custodians, the parties are still negotiating their searches. Plaintiffs proposed that Google apply to Ms. Porter Felt, Mr. Heft-Luthy, and Mr. Ketchum the same searches Google applied to the Google-selected custodians, see Plaintiffs' June 22 letter, and for Mr. Liao, Plaintiffs proposed that Google apply a smaller set of searches, see Plaintiffs' July 2 email. The searches identified in this letter are in addition to those proposed searches. Lastly, as a point of clarification, Plaintiffs' June 22 Letter mistakenly referred to the "Court-ordered" custodians, instead of the "Google-selected" custodians, when referring to the searches that Google should apply to Mr. Ketchum.

[REDACTED]



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ad5	OTR OR (off /3 record)	This search is likely to hit on relevant documents describing Incognito mode. GOOG-BRWN-00193106.
6	████████ OR ██████ OR ██████	This search is likely to hit on relevant documents regarding Google's efforts to gain "user trust and choice." GOOG-BRWN-00150516. ; <i>see also</i> GOOG-BRWN-00205911; GOOG-BRWN-00205913 ("████████" is focused on how "[u]sers should be and feel in control" and how Google should "[b]e transparent about user data collection, storage, and uses" and "[m]ake user choices meaningful and understandable.").
7	GaiaMint OR "Gia Mint"	This search is likely to hit on relevant documents concerning "GaiaMint," a "service that translates credentials into short lived, signed tokens (known as 'mints' or "GaiaMints." GOOG-BRWN-00057046. A GaiaMint is an example of an "authenticator." <i>Id.</i>
8	Zw! OR biscotti OR cookie!	This search is likely to hit on relevant documents concerning Google's use of twice-baked and other relevant cookies.
9	UMA OR "User Metric Analytics"	This search is likely to hit on relevant documents concerning Google's "User Metrics Analytics," which appears to be a back end process for Chrome that logs and syncs Google Chrome usage data.
10	Finch	This search is likely to hit on relevant documents concerning Finch, a "Chrome experiments framework" which is used to "facilitate" the understanding of "the impact of Chrome experiments on user behavior on Google properties." GOOG-BRWN-00051406. Finch is relevant to identifying potential class members.
11	██████	This search is likely to hit on relevant documents concerning ██████████ ██████████ ██ ██ ██ ██ GOOG-BRWN-00061091.
12	██████	This search is likely to hit on relevant documents concerning ██████████ ██████████



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		[REDACTED] [REDACTED] GOOG-BRWN-00209131.
13	[REDACTED]	This search is likely to hit on relevant documents concerning [REDACTED] which is a [REDACTED] GOOG-BRWN-00061594, and [REDACTED] which is the [REDACTED] GOOG-BRWN-00061915.
14	[REDACTED]	This search is likely to hit on relevant documents concerning Google's goal to "[s]ystemically improve user privacy protection." GOOG-BRWN-00150515.
15	X-Client /10 (data OR header OR variation)	This search is relevant in terms of the parties' ongoing dispute regarding identification of class members, with Google employees admitting that this information can be used to identify Incognito browsing.
16	[REDACTED]	[REDACTED] appears to be the codename for a [REDACTED]. See, e.g., GOOG-BRWN-00152234.

V. Court-Ordered Custodians

Plaintiffs propose that Google apply the following additional searches to six of the seven Court-ordered custodians—Unni Narayanan, Jan Hannemann, Eric Miraglia, Rahul Roy-Chowdhury, Stephan Micklitz, and Brian Rakowski.

No.	Search Term	Basis for Adding
1	[REDACTED] [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] OR [REDACTED] [REDACTED] OR [REDACTED] OR [REDACTED]	As explained above, these appear to be relevant Google codenames, which these custodians may have used.
2	Zw! OR biscotti OR unauth!	This search is necessary to ensure that we capture documents concerning the private browsing data at issue in this case, which Google associates with these identifiers and refers to as unauthenticated or unauth.

BSF

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Sincerely,

A handwritten signature in blue ink, appearing to read "Beko Reblitz-Richardson", with a long horizontal flourish extending to the right.

Beko Reblitz-Richardson

A redacted signature consisting of three black rectangular boxes of varying sizes.

EXHIBIT 35

Redacted Version of
Document Sought to be
Sealed

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HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY

October 1, 2021

VIA E-MAIL

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Re: Google's Submission in Response to Special Master's Request for Technical
Descriptions of Burdens Associated With Providing Requested Information
Calhoun v. Google LLC, 20-cv-05416-LHK (SVK) (N. D. Cal.)

Dear Special Master Brush:

We write in response to your September 30, 2021 request for a technical description of the burdens associated with providing the additional information Plaintiffs have requested. Since Plaintiffs in both cases have already made selections under Step 3, we believe that the technical burdens associated with providing additional information under Steps 1 and 2 are neither proportional, nor required, nor beneficial, to efficiently resolving the disputes currently before the Special Master. *See* Order Following September 30, 2021 Discovery Hearing, Dkt. 329 ("Simply put, each and every transmission, whether or not authorized, neither can nor should be the subject of discovery in this case. Litigation of the size and magnitude of this action requires selection of discovery targets which allow the Parties the opportunity to prove their claims or defenses to a trier of fact within the bounds of Federal Rule of Civil Procedure 26.")

Please do not hesitate to let us know if you would benefit from any additional information or explanatory materials regarding the issues described below.

quinn emanuel urquhart & sullivan, llp

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MUNICH | NEUILLY-LA DEFENSE | NEW YORK | PARIS | PERTH | SALT LAKE CITY | SAN FRANCISCO | SEATTLE | SHANGHAI | SILICON VALLEY |
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HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY**Step 1: Burden of Identifying Every Data Source Potentially Containing Responsive ESI**

- Google maintains numerous distinct systems holding “data sources” which could potentially contain responsive ESI. These range from structured key-value storage systems (e.g. ████████ and ████████) to log systems storing data sequentially (██████). No single tool exists to query all of these distinct systems and generate a list of all data sources that may contain the specific data at issue in this case. The systems are designed independently for product usage. There is also no single team responsible for all potentially relevant data sources. To compile the requested information, separate subject matter experts for each system were required to identify, analyze, and describe potentially relevant data sources.
- Because individual product teams are responsible for data associated with their products, subject to Google’s policies, experts from different product teams were also required to identify potentially relevant sources.
- Even within a product, Google has many different systems that record log entries for different purposes, ranging from simple debugging to providing enterprise-level reporting to its customers. Teams are functionally differentiated and engineers in any given team will have responsibilities for different tools.
- Some of Google’s log processing systems producing reports for publishers entail configurations (written in [Borg Configuration Language](#)) that list multiple logs. However, these configurations only cover logs processed by that specific pipeline. Listing all potentially relevant logs, even within display ads, requires identifying, contacting, and working with several different teams and experts.

Step 2: Burden of Compiling Field Names

- Google stores its logs records in [protocol buffers](#). Protocol buffers related to the selected log sources are complex and include nested sub-messages that consist of other protocol buffers, that contain further nested sub-messages, and so forth. Each message file contains information about the name, type, identifying field number, and (in some cases) a comment about the field. To save space on disk, a protocol buffer record is encoded in a format in which the fields are identified by tag numbers.
- Because the logs in question have fields and message files from multiple protocol buffer files, Google cannot produce a single “.proto” file, but rather would be required to compile a list of hundreds of files—a complex exercise that will require many software engineering hours. Similar to how C++ compilers can walk through #include statements to produce a binary with all the relevant code and libraries linked in—but there are no readily available tools to reconstruct all the relevant source code that went into that specific binary—proto files import other proto files, using subsections of those files. Moreover, proto files related to the selected data sources are source code: they are submitted as source code, reviewed as source code, and run as source code.

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- A protocol buffer contains all *possible* tags that could contain data. With very few exceptions—such as the limited number fields that have the rarely used “required” tag—there is no requirement for any given field to be filled in. Moreover, it is impossible to enforce the semantics of what a field is used for from product to product, or even record to record. Some protocol buffers, such as those used in ad query logs or frontend logs, are shared across multiple Google products and the vast majority of fields listed therein will contain no data in a given record. For example, many fields pertain only to ads shown on Google’s search page and are irrelevant to ads on third-party websites.
- Providing a list of fields in a proto that are actually filled/used for the data at issue, is also burdensome. Google has no existing tool that provides a listing of populated fields based on a given set of conditions. In theory, Google engineers could create a Flume pipeline to parse each individual record, filter-in matching product/criteria, enumerate the filled fields, and add those to a running set. However, this is a non-trivial program to write, test, submit, and validate. Running this program over more than a handful of recent days would also require significant computer resources, as the potentially relevant log sources are in the hundreds of petabyte range. This list of fields would also contain highly sensitive information related to Google’s ads serving infrastructure and abuse detection, that is irrelevant to this matter and whose disclosure could cause Google substantial economic harm.

Step 2: Burden of Field Descriptions

- The semantics and usage of fields, even in a single data source, change over time, but given the difficulty in updating all references to a given field, names are very rarely changed. Because each product or record may use the same field in a different way, there is no single fixed definition that can be applied to all fields. To ensure that field descriptions are accurate, up to date, and fully capture the current field semantics, each description has to be verified by a team of engineers.
- No readily available tool exists to look up existing comments for a list of fields to create a “dictionary” of field names and comments. To generate the descriptions provided to date under Step 2, Google engineers had to hand copy, review, and verify field descriptions. This laborious process does not scale and is infeasible for multiple sources with thousands of fields.
- There is no single subject matter expert at Google that can, or could, provide descriptions for all data sources, let alone all fields within any given data source. Different subject matter experts are required to provide clear, precise description of fields (or group of fields) in any given context. For many fields, the subject matter expert has to consult additional source code and documentation to understand the logic whereby the field is written or read. On average, it should take a fast, knowledgeable engineer at least five minutes to write and verify a specific field description for a field they understand and use regularly. For

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100 fields, that equates to a full day of work, just for relatively simple fields. Performing code archeology to determine possible changes to these fields or updates to semantics would further greatly increase the effort required. The field descriptions provided so far were generated manually by engineers working long hours, in addition to their usual responsibilities.

Step 3: Running searches on Selected Data Sources

- Google’s logging systems are not designed to facilitate Googlers searching for, or accessing, data for specific individual users. To the contrary, Google’s systems are purposely designed to prevent employees from querying data for specific users. These protections entail additional levels of access-control lists (“ACLs”) on specific fields in logs, including all user identifiers. For any one Googler to be able to access fields that contain raw user identifiers, they must obtain special permissions, and receive approvals from privacy review committees. This process is purposely designed to limit access to sensitive information and it is enforced through a number of technical barriers.
- In addition to the ACLs, publisher configurations, Google policies, and/or legislation require further encryption of identifiers. Many are specifically labelled as DO_NOT_ACCESS_WITHOUT_A_PRIVACY_REVIEW; these fields require privacy reviews and specialized keys (controlled by the privacy reviewers) to gain access. These systems were designed to only allow very specialized code to access. To perform the requested searches at short notice, multiple engineers need to gain permissions, and write this code.
- For debugging purposes, Google maintains 8 days of various logs sources in an optimized format that is queryable by Dremel. (Dremel is a distributed system for quickly querying large datasets. Users write SQL queries that are then executed by Dremel’s execution engine over data stored in a special columnar data format.) Beyond 8 days, the data is stored in a less optimized format to save disc space allowing the logs to be preserved for longer. To query beyond 8 days, Google must use more specialized tooling, such as Flume pipelines, and write custom SQL pipelines that search and process data. (Flume is a framework for executing batch (as opposed to streaming) workloads in parallel over large datasets. Engineers write Flume pipelines in C++ or Java and run these pipelines on Borg to process data. Unlike Dremel, Flume does not require data to be stored in a Columnar format, but it does require significantly more developer time to configure, launch, and tune than a simple Dremel query.) Creating a new search in Flume requires writing C++ scripts and BORG configurations that have to be vetted and submitted for code review.
- Searching across historic log files entails significant computing resources. For example, [REDACTED]

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We hope this information is helpful and look forward to continuing to work with Plaintiffs and the Special Master to collaboratively resolve the disputes currently before the Special Master.

Respectfully,

QUINN EMANUEL URQUHART & SULLIVAN, LLP

A handwritten signature in black ink, appearing to read "Josef Ansorge". The signature is written in a cursive, flowing style.

Josef Ansorge

JA

EXHIBIT 36

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November 9, 2021

SENT VIA EMAIL

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**Re: *Chasom Brown, et al., v. Google LLC*, Case No. 5:20-cv-03664-LHK
Chris Liao Document Issues**

Dear Counsel,

As the parties have agreed, Plaintiffs will be deposing Chris Liao on December 2 and 3. In connection with that deposition, we have identified certain issues with Google's document productions. In addition to producing earlier-in-time emails, Plaintiffs ask that you please quickly investigate the issues below and produce any additional documents no later than November 23.

For the following documents, please identify (and if they have not already been produced, please produce and identify) the following links:

- GOOG-CABR-03664145: "3M New UUIDs/section"; http://shortn_Bfff6ggAisk"; "[some useful queries](#)"; "[example](#)"; "Implementation and Rollout Plan: [\[b/121144670\]](#)" "[\[b/159213961\]](#)"; "[\[b/161366859\]](#)".

BOIES SCHILLER FLEXNER LLP



Google Counsel
October 25, 2021
Page 2

- GOOG-CABR-03664108: “see go/zwieback/resident-properties.md for a full treatment”; “for a full inventory see this file”; [b/133456674]”.
- GOOG-CABR-03665840: [REDACTED]
- GOOG-CABR-04706890: “Go/id-filtering”, “go/id-joinability”, “go/id-logging”.
- GOOG-CABR-03664108: “for a full inventory see this file”; “such as described here”, “the standard production build-horizon of 6 months”, and “informational co-diversion in GWS”.
- GOOG-CABR-03665840: “go/display-[REDACTED]”, “go/display-[REDACTED]”, “go/display-[REDACTED]”, “go/display-[REDACTED]”, “go/display-[REDACTED]”, “go/display-[REDACTED]”, “//contentads/identity/[REDACTED]”, “go/pic-gmob-slides”, “go/[REDACTED]”.
- GOOG-CABR-00393660: “go/unified-display-signed-in”
- GOOG-CABR-04205200: “go/[REDACTED]”.
- GOOG-CABR-00547295: “log-based monitoring”, “monitoring and impact analysis”, “here”, “inferred”, “different levels of accuracy”, “input signals”, “go/chromeguard-monitor” “no significant changes in incognito usage”, “(proxy) metrics” for “Search” and “Display”.

From GOOG-CABR-04706890, identified above, please also identify the citations referenced in footnote four.

GOOG-CABR-04695992 includes images and graphs that are illegible in the version produced. Please produce a version in which they are legible, or produce the version of the images and graphs that appear in this document in legible form.

Please respond to this letter by November 16.

Sincerely,

A handwritten signature in black ink, appearing to read "Erika Nyborg-Burch".

Erika Nyborg-Burch

EXHIBIT 39

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

---o0o---

CHASOM BROWN, et al.,)
on behalf of themselves and)
all others similarly)
situated,)
Plaintiffs,) Case No.
vs.) 5:20-cv-03664-LHK
GOOGLE LLC,)
Defendant.)
_____)

---o0o---

Videotaped Zoom Deposition of
WING PAN "BERT" LEUNG
CONFIDENTIAL
Friday, March 4, 2022

---o0o---

Katy E. Schmidt
RPR, RMR, CRR, CSR 13096
Veritext Job No.: 5091833

Page 1

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

---o0o---

CHASOM BROWN, et al.,)
on behalf of themselves and)
all others similarly)
situated,)

)
) Case No.
) 5:20-cv-03664-LHK
vs.)

)
GOOGLE LLC,)

)
Defendant.)

_____)

BE IT REMEMBERED that, pursuant to Notice, and
on Friday, the 4th day of March, 2022, commencing at the
hour of 9:03 a.m., thereof, in Sunnyvale, California,
before me, KATY E. SCHMIDT, a Certified Shorthand
Reporter in and for the County of Yolo, State of
California, there virtually personally appeared

WING PAN "BERT" LEUNG

called as a witness herein, who, being by me first duly
sworn, was thereupon examined and interrogated as
hereinafter set forth.

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8 Also present:

9 Sean Grant, Videographer

10 Matthew Gubiotti, In-house counsel

11 ---o0o---

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QUESTIONS INSTRUCTED NOT TO ANSWER

Page	Line
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(NOTHING OFFERED.)

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1 BY MR. MAO: 09:22

2 Q. Okay. Have you ever seen this document 09:22

3 before? You may take the time to read it. 09:22

4 A. I'm not aware if I read this before. 09:22

5 Q. Got it. 09:22

6 Do you know whether or not you're going to 09:22

7 appear for an evidentiary hearing on April 21st of this 09:22

8 year? 09:22

9 A. Sorry. Can you repeat the question? 09:22

10 Q. Do you know -- yeah. Right. 09:23

11 Do you know whether or not you're going to 09:23

12 appear for an evidentiary hearing on April 21st of this 09:23

13 year? 09:23

14 MR. ANSORGE: Objection. Vague and 09:23

15 foundation. 09:23

16 THE WITNESS: I'm only aware of there were 09:23

17 initial -- some initial scheduling on February -- end of 09:23

18 February. I forgot which day that I rescheduled. 09:23

19 BY MR. MAO: 09:23

20 Q. So there was scheduling for February of this 09:23

21 year for what? What is it that you're aware of? 09:23

22 A. Deposition. 09:23

23 Q. Depositions. 09:23

24 You mean scheduling of your deposition for 09:23

25 sometime in February of this year? 09:23

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1 BY MR. MAO: 09:25

2 Q. Okay. Have you been keeping up with this 09:25

3 case? 09:25

4 MR. ANSORGE: Objection. Vague. 09:25

5 THE WITNESS: What do you mean by keeping up, 09:25

6 to which detail? 09:25

7 BY MR. MAO: 09:25

8 Q. When were you first brought in by Google to 09:25

9 support the Brown versus Google case, this case on 09:25

10 private browsing? 09:25

11 MR. ANSORGE: Objection. Form. 09:25

12 THE WITNESS: I've heard about a Brown case 09:25

13 probably a year ago or so. I forgot how long. 09:25

14 BY MR. MAO: 09:25

15 Q. Was that in 2021 or 2020 you were first -- you 09:25

16 first heard about the Brown case? 09:25

17 A. I don't recall exactly whether it's 2021 or 09:25

18 2020. Maybe 2020. 09:25

19 Q. Okay. And were you brought in by counsel or 09:25

20 were you brought in within just the Google engineering 09:25

21 team, the team that you were working with Mr. Liao? 09:25

22 MR. ANSORGE: Objection. Form. 09:26

23 And I want to caution the witness to the 09:26

24 extent the question is asking you to reveal privileged 09:26

25 attorney-client communications. Yeah. Please keep 09:26

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1 A. As of that -- possibly those other production 11:54
2 logs -- those existing production logs, that is logs for 11:54
3 likely some ads traffic, and each of the logs I would 11:55
4 assume -- I would expect they would be certain retention 11:55
5 period for each of them. 11:55

6 Q. Okay. So other than looking at the logs, are 11:55
7 there other ways as to how we can tell when the 11:55
8 incognito bit went into production for the purposes of 11:55
9 logs? 11:55

10 MR. ANSORGE: Objection. Form and compound. 11:55

11 THE WITNESS: Can you clarify what do you 11:55
12 mean by this maybe_Chrome_incognito bit going to 11:55
13 production? Do you mean started the computation, some 11:55
14 production server -- 11:55

15 BY MR. MAO: 11:55

16 Q. You say "We have been logging the fields for a 11:55
17 while"; right? 11:55

18 My question is: How do I know when you 11:55
19 started "been logging the fields for a while?" How do 11:56
20 I tell? 11:56

21 MR. ANSORGE: Objection. Vague. 11:56

22 THE WITNESS: First of all, if I remember 11:56
23 correctly, when I said in that conversation those fields 11:56
24 may be logging for a while, I do not mean to say I know 11:56
25 the start time, the first day those data are being 11:56

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1 available. 11:56

2 And I do not mean those data will still -- all 11:56

3 those data will still keep preserve over the time 11:56

4 because that is control by certain log retention, which 11:56

5 is in force on the log itself, which is not under my 11:57

6 control. 11:57

7 What I mean in that conversation is those 11:57

8 data, which is the output of the -- for the computation, 11:57

9 which include the enum and the maybe_Chrome_incognito 11:57

10 bit, could be in those production -- could be in some 11:57

11 production logs already at the time that conversation 11:57

12 happened. 11:57

13 BY MR. MAO:

14 Q. Were you ever told to preserve the incognito 11:57

15 bit in these production logs? 11:57

16 MR. ANSORGE: Objection. Vague. 11:57

17 THE WITNESS: Can you -- 11:57

18 BY MR. MAO: 11:57

19 Q. Let me clarify. 11:57

20 Were you ever told for the purposes of this 11:57

21 litigation to retain the logs that contain these 11:57

22 incognito bits? 11:58

23 A. As far as I remember, I was told to retain the 11:58

24 documentation regarding this project. 11:58

25 Q. Were you actually told to retain and preserve 11:58

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1 the data for the purposes of this litigation? 11:58

2 MR. ANSORGE: Here I want to caution the 11:58

3 witness not to reveal attorney-client privileged 11:58

4 communications. 11:58

5 BY MR. MAO: 11:58

6 Q. You may answer. 11:58

7 A. I don't recall -- I'm not entirely sure 11:58

8 whether this is -- this would fall into the privileged 11:58

9 conversation so I probably need to consult the counsel 11:58

10 on this. 11:58

11 Q. Did you have any conversations, other than 11:59

12 with counsel, regarding whether or not data containing 11:59

13 the incognito bit should be preserved? 11:59

14 A. If this is a -- I don't recall the details, 11:59

15 again. As I said, this is just a tiny part of my daily 11:59

16 job. 11:59

17 I would assume, if there are ever any 11:59

18 conversation regarding this litigation and logs being 11:59

19 preserved, it should likely be with the counsel, I would 11:59

20 suppose, which as I said, I'm not entirely sure whether 11:59

21 this would be privileged or not. 11:59

22 Q. So other than with counsel, you do not recall 11:59

23 currently any conversations where you were told to 11:59

24 preserve this data. 11:59

25 Is that correct? 11:59

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1 effort to preserve this data? 12:02

2 I'm not talking about conversations. I just 12:02

3 want to know whether or not you and Google undertook any 12:03

4 efforts to preserve this data? 12:03

5 MR. ANSORGE: Objection. Foundation. Form. 12:03

6 Asked and answered. 12:03

7 THE WITNESS: As far as I can tell -- and 12:03

8 first of all, again, I am not owning the logging 12:03

9 infrastructure, nor defining the retention period. 12:03

10 As far as I'm aware of, I'm not aware of any 12:03

11 change to the retention period of ads logs. 12:03

12 BY MR. MAO: 12:03

13 Q. Who owns the logging retention period for this 12:03

14 project, the part about adding the incognito bit into 12:03

15 the logs? Who would be responsible by Google for that? 12:03

16 MR. ANSORGE: Objection. Compound. 12:03

17 THE WITNESS: This project includes logging 12:03

18 certain outputs into the -- into the production logs. 12:04

19 But as I said earlier, the retention of the 12:04

20 production log, which include other data as well, is not 12:04

21 controlled by this project, nor my team. 12:04

22 BY MR. MAO:

23 Q. Okay. But the changes to the actual fields 12:04

24 here, right, that is owned by your team, isn't it? 12:04

25 MR. ANSORGE: Objection. Vague. 12:04

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1 THE WITNESS: Can you define what do you mean 12:04
2 by those fields? Do you mean the output that I 12:04
3 mentioned earlier? Only the output related to this 12:04
4 project? 12:04
5 BY MR. MAO: 12:04
6 Q. Sure. 12:04
7 The output that you've been logging referred 12:04
8 to in your line here on October 27, 2021, right, the 12:04
9 output in, "We have been logging the fields for a while 12:05
10 already," is that owned by your team? 12:05
11 A. The logic to compute those output and to add 12:05
12 it to production log is only by my team. But the whole 12:05
13 ads log itself and also the whole -- the logging 12:05
14 infrastructure, they are not owned by my team. 12:05
15 Q. Okay. So with regard to the logic that you 12:05
16 own, okay, your team owns, did you take -- undertake any 12:05
17 efforts to preserve, okay, whatever data or 12:05
18 documentation you have as to when the logic changed? 12:05
19 The change in the logic so that you'd be logging these 12:05
20 additional fields or additional output, whatever you 12:06
21 want to call it. 12:06
22 MR. ANSORGE: Objection. Form, and compound. 12:06
23 THE WITNESS: Sorry. I got lost in the 12:06
24 question. Can you repeat your question? 12:06
25 ///

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1 THE WITNESS: First of all, I don't recall 06:04
2 when was the first time that I've been in touch with 06:04
3 those lawyers. 06:04

4 Second, also it's because it's a very long 06:04
5 time ago, I don't even recall the context of that 06:04
6 conversation. 06:04

7 BY MR. MAO: 06:04

8 Q. Were you asked to find out that date in 06:04
9 preparation for this deposition by anybody? 06:04

10 A. I'm not aware of that. 06:04

11 Q. What about for the upcoming hearing, were you 06:04
12 asked by anybody to find out that date? 06:04

13 A. What do you mean by "upcoming hearing"? 06:04

14 Q. The upcoming hearing, were you asked by 06:04
15 anybody to figure out when you received the evidence 06:04
16 preservation letter? 06:04

17 A. So as far as I understand, upcoming hearing 06:04
18 means that doesn't happen yet. I'm not sure what 06:04
19 upcoming hearing you're talking about, so I'm not sure 06:05
20 how to answer your question. 06:05

21 Q. Right. So you're not -- you don't know. 06:05
22 Is that the answer? 06:05

23 MR. ANSORGE: Yeah. Objection. Asked and 06:05
24 answered. 06:05

25 And could I -- could we get a time count, 06:05

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1 please? 06:05

2 THE VIDEOGRAPHER: 6:59. 06:05

3 MR. MAO: I'll pass it to you, Mr. Ansorge. 06:05

4 That's the record I will take. 06:05

5 MR. ANSORGE: Great. Thank you, Mr. Mao. 06:05

6 Thank you, Mr. Leung. 06:05

7 EXAMINATION BY MR. ANSORGE 06:05

8 BY MR. ANSORGE: 06:05

9 Q. Do you recall Mr. Mao asking you a series of 06:05

10 questions about the maybe_Chrome_incognito bit? 06:05

11 A. Yes. 06:05

12 Q. Why is it called the maybe_Chrome_incognito 06:05

13 bit? 06:05

14 A. Well, first of all, it's many times that 06:05

15 describing in this deposition is coming from a heuristic 06:05

16 approximation to identify those traffic. 06:05

17 So by adding that "maybe" prefix in the field, 06:06

18 make it even more clear that it's not a reliable signal, 06:06

19 it does not mean to be accurate. That's why adding that 06:06

20 prefix will just help to prevent misuse of this 06:06

21 information further by ad engineers. 06:06

22 Q. Is the maybe_Chrome_incognito bit a signal 06:06

23 that is sent from an instance of the Chrome browser to 06:06

24 Google? 06:06

25 A. No. 06:06

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1 Q. Is the maybe_Chrome_incognito bit a definitive 06:06
2 or reliable signal to identify incognito mode? 06:06
3 A. No. 06:06
4 Q. Is the maybe_Chrome_incognito bit a signal the 06:06
5 browser sends to [REDACTED]? 06:06
6 A. No. 06:06
7 Q. Are you aware of [REDACTED] using the 06:06
8 maybe_Chrome_incognito field bit in any way? 06:06
9 A. I am not aware of any of that. 06:07
10 MR. ANSORGE: No further questions at this 06:07
11 time. 06:07
12 MR. MAO: I have a redirect. 06:07
13 FURTHER EXAMINATION BY MR. MAO 06:07
14 BY MR. MAO: 06:07
15 Q. Are you aware of [REDACTED] using the input which is 06:07
16 relied on by the maybe_incognito bit? 06:07
17 A. Which part of the input you are talking about? 06:07
18 Q. The input that goes into the incognito bit. 06:07
19 A. So as I mentioned earlier, that 06:07
20 maybe_Chrome_incognito bit, the heuristic approximation 06:07
21 that is coming from more than one input; right? The 06:07
22 user agent, the presence of X-Client-Data header, for 06:07
23 example, I'm aware of user agent being part of the 06:08
24 information passing the [REDACTED], but I'm not aware of the 06:08
25 presence of X-Client-Data header being part of the 06:08

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REPORTER'S CERTIFICATE

---o0o---

STATE OF CALIFORNIA)
) ss.

COUNTY OF YOLO)

I, KATY E. SCHMIDT, a Certified Shorthand
Reporter in and for the State of California, duly
commissioned and a disinterested person, certify:

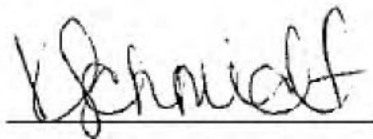
That the foregoing deposition was taken before me
at the time and place herein set forth;

That WING PAN "BERT" LEUNG, the deponent herein,
was put on oath by me;

That the testimony of the witness and all
objections made at the time of the examination were
recorded stenographically by me to the best of my
ability and thereafter transcribed into typewriting;

That the foregoing deposition is a record of the
testimony of the examination.

IN WITNESS WHEREOF, I subscribe my name on this
7th day of March, 2022.



Katy E. Schmidt, RPR, RMR, CRR, CSR 13096
Certified Shorthand Reporter in and for the
County of Sacramento, State of California

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EXHIBIT 40

Redacted Version of
Document Sought to be
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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

---o0o---

PATRICK CALHOUN, et al.,)
on behalf of themselves and)
all others similarly)
situated,)

Plaintiffs,

)Case No.

)5:20-cv-5146-LHK-SVK

vs.)

GOOGLE LLC,)

Defendant.)

-----)
CHASOM BROWN, et al.,)
on behalf of themselves and)
all others similarly)
situated,)

Plaintiffs,

)Case No.

)5:20-cv-03664-LHK

vs.)

GOOGLE LLC,)

Defendant.)

---o0o---

Videotaped Zoom Deposition of
HUEI-HUNG (CHRIS) LIAO
CONFIDENTIAL, ATTORNEYS' EYES ONLY
Friday, December 3, 2021

---o0o---

Katy E. Schmidt
RPR, RMR, CRR, CSR 13096
Veritext Job No.: 4962198

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

---o0o---

PATRICK CALHOUN, et al.,)
on behalf of themselves and)
all others similarly)
situated,)

Plaintiffs,

)Case No.

)5:20-cv-5146-LHK-SVK

vs.)

GOOGLE LLC,)

Defendant.)

CHASOM BROWN, et al.,)
on behalf of themselves and)
all others similarly)
situated,)

Plaintiffs,

)Case No.

)5:20-cv-03664-LHK

vs.)

GOOGLE LLC,)

Defendant.)

BE IT REMEMBERED that, pursuant to Notice, and
on Friday, the 3rd day of December, 2021, commencing at
the hour of 9:05 a.m., thereof, in Sunnyvale,
California, before me, KATY E. SCHMIDT, a Certified
Shorthand Reporter in and for the County of Yolo, State
of California, there virtually personally appeared
HUEI-HUNG (CHRIS) LIAO
called as a witness herein, who, being by me first duly
sworn, was thereupon examined and interrogated as
hereinafter set forth.

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4 Ryan McGee, In-house counsel

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---o0o---

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(NOTHING OFFERED.)

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1	A. Okay. I have it.	01:06
2	Q. This looks to me to basically be a variant of	01:06
3	your prior graph, I think.	01:07
4	You could take a look --	01:07
5	A. It appears so.	01:07
6	Q. Yeah.	01:07
7	So my question to you, and I think -- I think	01:07
8	Mr. Barnes asked this, either from this graph or the	01:07
9	graph like you saw before on the other exhibit that was	01:07
10	right below this.	01:07
11	I think my question to you is -- I think --	01:07
12	oh, yes. There, I see it. It's been grayed out.	01:07
13	You see on the top right, right under "Parse	01:07
14	PPID," there's a "Parse privacy req params"?	01:07
15	Again, I might be referring to the wrong one	01:07
16	of two graphs. But I believe that you said that that's	01:07
17	parsing whether or not the incoming signal from the	01:07
18	external world contains a privacy preference or setting	01:07
19	of some type.	01:07
20	Is that -- do I have that right?	01:08
21	MR. ANSORGE: Objection. Mischaracterizes	01:08
22	prior testimony.	01:08
23	THE WITNESS: For the box of "parse privacy	01:08
24	req," which stands for "request," parameters, the	01:08
25	purpose of this piece of logic is to parse the URL	01:08

1 parameters that are related to privacy treatment as we 01:08
2 receive from the URL network request itself. 01:08

3 As I stated yesterday, I believe some of the 01:08
4 examples of such a URL can be, for example, GDPR, which 01:08
5 indicates to our systems that applicable GDPR behaviors 01:08
6 have to be enabled for this particular ad query. 01:08

7 I believe another example I gave was TFCD, 01:08
8 which stands for "treat for child directed." I believe 01:09
9 the presence of the parameter enables our systems to 01:09
10 treat the ad query with the necessary child directed 01:09
11 treatments. 01:09

12 BY MR. MAO:

13 Q. Got it. Got it. 01:09

14 As far as you're aware, amongst these privacy 01:09
15 signals, is there one for incognito mode browsing on 01:09
16 Chrome? 01:09

17 A. No. 01:09

18 Q. Is there a reason that you're aware as to why 01:09
19 that would not be a privacy req parameter for [REDACTED]? 01:09

20 MR. ANSORGE: Objection. Form. 01:09

21 THE WITNESS: I am not aware of a URL 01:09
22 parameter that would indicate incognito mode. 01:09

23 BY MR. MAO: 01:09

24 Q. What about a parameter specifically to signal 01:09
25 to [REDACTED] to parse out that, oh, this is incognito mode 01:09

1 traffic? 01:10

2 A. There is no explicit signal to identify 01:10

3 incognito mode traffic. 01:10

4 Q. Were you ever involved in any discussions on 01:10

5 whether or not [REDACTED] should be designed to receive and 01:10

6 parse such a signal? 01:10

7 A. I was involved in projects having to work with 01:10

8 incognito mode. 01:10

9 Q. Was there a discussion on whether or not that 01:10

10 should be a signal to [REDACTED]? Whether or not that design 01:10

11 should include, you know, a signal to [REDACTED], saying that 01:10

12 the user or device was browsing in incognito mode? 01:10

13 A. I do not recall if there was a specific 01:10

14 discussion around using the URL parameter as a signal 01:10

15 to [REDACTED] to indicate incognito mode. 01:10

16 But as I stated, I was involved in projects 01:11

17 related to incognito mode. 01:11

18 Q. How about amongst those projects that you were 01:11

19 involved, were there any discussions on whether or not 01:11

20 there were any other types of signals other than a URL 01:11

21 parameter signal for incognito traffic that would be 01:11

22 given to [REDACTED] at the -- 01:11

23 MR. ANSORGE: Objection. 01:11

24 MR. MAO: Sorry. It was at the parsing layer, 01:11

25 Ms. Court Reporter. 01:11

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1 Yeah. Go ahead, Joey, please. 01:11

2 MR. ANSORGE: Yeah. Objection. Vague. 01:11

3 THE WITNESS: Can you clarify which part of 01:11

4 ████ you're referring to in this question? 01:11

5 BY MR. MAO: 01:11

6 Q. Sure. Sure. 01:11

7 I'm looking at the parsing layer. And my 01:11

8 understanding of that is that that's the first layer 01:11

9 that kind of hits █████ that says, hey, here are all the 01:11

10 signals coming from the external world in which, you 01:11

11 know, like might be relevant, you know, for terms of 01:11

12 ████ digesting and then spitting out whatever it spits 01:11

13 out on the other end. 01:11

14 My question is -- you limited your prior 01:11

15 answers to a URL signal for █████ and you not being aware 01:12

16 of that being a discussion. 01:12

17 My question to you is whether or not you're 01:12

18 aware of a discussion or proposal on a non-URL signal 01:12

19 that would be sent to █████? 01:12

20 A. I do not recall the specifics of such a 01:12

21 discussion. I do not recall if such a discussion -- 01:12

22 specific discussion happened. 01:12

23 But as I stated, I was involved in projects 01:12

24 that have -- have to do with incognito mode. And there 01:12

25 was discussion around proxy signals that we can use to 01:12

REPORTER'S CERTIFICATE

---o0o---

STATE OF CALIFORNIA)
) ss.

COUNTY OF YOLO)

I, KATY E. SCHMIDT, a Certified Shorthand
Reporter in and for the State of California, duly
commissioned and a disinterested person, certify:

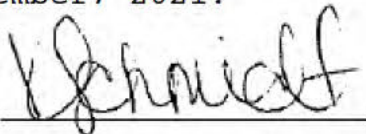
That the foregoing deposition was taken before me
at the time and place herein set forth;

That HUEI-HUNG (CHRIS) LIAO, the deponent herein,
was put on oath by me;

That the testimony of the witness and all
objections made at the time of the examination were
recorded stenographically by me to the best of my
ability and thereafter transcribed into typewriting;

That the foregoing deposition is a record of the
testimony of the examination.

IN WITNESS WHEREOF, I subscribe my name on this
6th day of December, 2021.



Katy E. Schmidt, RPR, RMR, CRR, CSR 13096
Certified Shorthand Reporter
in and for the
County of Sacramento,
State of California

Ref. No. 4962198 KES

EXHIBIT 41

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IN THE UNITED STATES DISTRICT COURT
 FOR THE NORTHERN DISTRICT OF CALIFORNIA
 SAN JOSE DIVISION

---o0o---

CHASOM BROWN, et al.,)
 on behalf of themselves and)
 all others similarly)
 situated,)

Plaintiffs,) Case No.

) 5:20-cv-03664-LHK

vs.)

GOOGLE LLC,)

Defendant.)

-----)

---o0o---

Videotaped Zoom Deposition of

MANDY LIU

CONFIDENTIAL

Tuesday, March 8, 2022

---o0o---

Katy E. Schmidt
 RPR, RMR, CRR, CSR 13096
 Job No.: 5121622

Page 1

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19 Sean Grant, Videographer

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(NOTHING OFFERED.)

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1 Does that work for you? 09:05

2 THE WITNESS: Yes. 09:05

3 MR. FRAWLEY: Okay. Does that work for you, 09:05

4 Joey? 09:05

5 MR. ANSORGE: Yeah. Just bearing in mind we 09:05

6 got that 1:00 o'clock Special Master thing. 09:05

7 So thank you, Mr. Frawley. Let's go off the 09:05

8 record. 09:05

9 THE VIDEOGRAPHER: Going off the record. The 09:05

10 time is 12:05 p.m. 09:05

11 (Break taken in proceedings.) 09:11

12 THE VIDEOGRAPHER: Back on the record. The 09:12

13 time is 12:12 p.m. 09:12

14 MR. FRAWLEY: Ms. Liu, I don't have any 09:12

15 further questions at this time. 09:12

16 Thank you. 09:12

17 THE WITNESS: Okay. 09:12

18 MR. ANSORGE: I'll have a few. 09:12

19 EXAMINATION BY MR. ANSORGE 09:12

20 BY MR. ANSORGE: 09:12

21 Q. Ms. Liu, could you please pull up Exhibit 4? 09:12

22 A. Yes, I'm -- 09:12

23 Q. Let me know once you have it. 09:12

24 Do you recall Mr. Frawley asking you a series 09:12

25 of questions about this document earlier today? 09:12

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1 A. Yes. 09:13

2 Q. Please go down to look at the second comment 09:13

3 from Mr. Ary Young. It's starting on the bottom of the 09:13

4 first page with the Bates number ending in 526. 09:13

5 Do you see that? 09:13

6 A. Yes. 09:13

7 Q. Do you see where Ary Young asks, quote, "We 09:13

8 can't detect with certainty," unquote? Do you see that? 09:13

9 A. Yes. 09:13

10 Q. Can you please read out your response to 09:13

11 Ary Young which you provided in that chat? 09:13

12 A. Sure. My response was, quote: 09:13

13 "No. We can't, that's mainly because the incognito 09:13

14 detection relies on the absence of ads X-Client-Data 09:13

15 header, but there are other cases where Chrome 09:13

16 doesn't send this header. For example, if the 09:13

17 browser hasn't received any experiment config yet 09:13

18 (go slash detect-incognito)" link, end quote. 09:14

19 Q. Ms. Liu, does the maybe_Chrome_incognito 09:14

20 Boolean field detect incognito with certainty? 09:14

21 A. No. 09:14

22 MR. ANSORGE: No further questions at this 09:14

23 time. We reserve the right if Mr. Frawley has any 09:14

24 further questions. 09:14

25 MR. FRAWLEY: I think I have a couple of 09:14

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1 recross questions. 09:14

2 FURTHER EXAMINATION BY MR. FRAWLEY 09:14

3 BY MR. FRAWLEY: 09:14

4 Q. So we can stay on this exhibit, Exhibit 4. 09:14

5 Now, Ms. Liu, do you see where you wrote 09:14

6 "e.g., if the browser hasn't received any experiment 09:14

7 config yet"? 09:14

8 A. Yes. 09:14

9 Q. Do you know how often that happens? 09:14

10 MR. ANSORGE: Objection. Vague. 09:14

11 THE WITNESS: No. 09:14

12 BY MR. FRAWLEY: 09:14

13 Q. Did you ever do any research to figure out how 09:14

14 often that happens? 09:14

15 A. No. 09:15

16 Q. Okay. 09:15

17 MR. FRAWLEY: I actually think that's all I 09:15

18 have. 09:15

19 MR. ANSORGE: Thank you. 09:15

20 We're fine with going off the record, 09:15

21 Mr. Frawley, if you are. 09:15

22 And thank you, Ms. Liu. 09:15

23 THE VIDEOGRAPHER: This concludes today's 09:15

24 videotaped deposition of Mandy Liu. We are off the 09:15

25 record at 12:15 p.m. 09:15

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REPORTER'S CERTIFICATE

---o0o---

STATE OF CALIFORNIA)
) ss.

COUNTY OF YOLO)

I, KATY E. SCHMIDT, a Certified Shorthand
Reporter in and for the State of California, duly
commissioned and a disinterested person, certify:

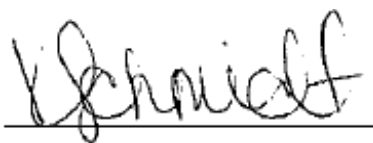
That the foregoing deposition was taken before me
at the time and place herein set forth;

That MANDY LIU, the deponent herein, was put on
oath by me;

That the testimony of the witness and all
objections made at the time of the examination were
recorded stenographically by me to the best of my
ability and thereafter transcribed into typewriting;

That the foregoing deposition is a record of the
testimony of the examination.

IN WITNESS WHEREOF, I subscribe my name on this
8th day of March, 2022.



Katy E. Schmidt, RPR, RMR, CRR, CSR 13096
Certified Shorthand Reporter
in and for the
County of Sacramento,
State of California

Ref. No. 5121622 KES

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EXHIBIT 42

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

---o0o---

CHASOM BROWN, et al.,)
on behalf of themselves and)
all others similarly)
situated,)

Plaintiffs,) Case No.

) 5:20-cv-03664-LHK

vs.)

GOOGLE LLC,)

Defendant.)

-----)

---o0o---

Videotaped Zoom Deposition of

DR. CAITLIN SADOWSKI

CONFIDENTIAL

Thursday, March 10, 2022

---o0o---

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Examination by Mr. McGee

08

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QUESTIONS INSTRUCTED NOT TO ANSWER

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(NOTHING OFFERED.)

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1 so I -- part of it cut off. 05:57

2 Q. Sure. 05:57

3 I'm asking -- let me mute my computer -- your 05:57

4 colleagues were e-mailing me. 05:57

5 The is underscore Chrome underscore non 05:57

6 underscore incognito, you said that it's not GAIA keyed. 05:57

7 What do you mean by that? 05:58

8 A. I did not say that is underscore Chrome 05:58

9 underscore non underscore incognito underscore mode is 05:58

10 not GAIA keyed. You had asked about [REDACTED] logs. 05:58

11 Q. Okay. Let me just then back it up. 05:58

12 On your information sheet, Notice 2, Topic 10, 05:58

13 there are -- there appear to be two field names or -- 05:58

14 let me back it up so we're speaking the same language. 05:58

15 What would you consider the is underscore 05:58

16 Chrome underscore non underscore incognito -- how -- 05:58

17 what -- how would someone at Google describe that? Is 05:58

18 it a field? Is it a field name? Is it a bit? I'm 05:59

19 trying to understand that. What's the jargon that 05:59

20 someone at Google would use to refer to those? 05:59

21 MR. ANSORGE: Objection. Compound. 05:59

22 THE WITNESS: I think there are many different 05:59

23 ways someone at Google might use to refer to those. 05:59

24 There is multiple jargon we could call it. 05:59

25 So I would say that is underscore Chrome 05:59

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1 underscore non underscore incognito underscore mode is 05:59
2 a binary field that is specifically used only in temp 05:59
3 [REDACTED] logs. 05:59
4 BY MR. MCGEE: 05:59
5 Q. And why is it only in temp [REDACTED] logs? 05:59
6 A. It was a field that was created by the [REDACTED] 06:00
7 team to help them understand potential problems with 06:00
8 their product location and where searching so that they 06:00
9 could develop the best product possible for Google 06:00
10 users. 06:00
11 Q. Okay. And it -- there's a note here that it 06:00
12 was introduced in 2017, but then the project wrapped up 06:00
13 in June of 2018. 06:00
14 Is that binary field still implemented at 06:00
15 Google? 06:00
16 MR. ANSORGE: Objection. Vague. 06:00
17 THE WITNESS: That binary field is -- still 06:00
18 exists as a binary field in and only in [REDACTED] logs. 06:00
19 BY MR. MCGEE: 06:01
20 Q. Are values written to that binary field in 06:01
21 [REDACTED] logs? 06:01
22 A. Yes. I believe values are written to that 06:01
23 binary field in [REDACTED] logs. 06:01
24 Q. So even though the project wrapped in June of 06:01
25 2018, that is still an actively used binary field? 06:01

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1 MR. ANSORGE: Objection. Form. 06:01

2 THE WITNESS: As I understand it, it is not 06:01

3 actively used. It is still being written. It is not 06:01

4 being reviewed. 06:01

5 BY MR. MCGEE: 06:01

6 Q. Can you please clarify what you mean by "not 06:01

7 being reviewed"? 06:01

8 A. So from talking to Quentin, this field went 06:02

9 into a particular dashboard that the [REDACTED] team used 06:02

10 to identify situations where they are not getting a 06:02

11 location header but should be getting a location header. 06:02

12 And if a -- in situations where an X-Client-Data header 06:02

13 is not sent, they would also expect a location header to 06:02

14 not be sent in most situations like that. 06:02

15 So if there is an X-Client-Data header but 06:02

16 there's no location header, then that's potentially 06:02

17 indicative of a bug in the system. 06:02

18 So they have a dashboard that shows, you know, 06:02

19 how often that occurs and they could look at to, you 06:02

20 know, minimize the amount of times where a location 06:02

21 header should be sent but isn't sent. And they use that 06:03

22 dashboard to improve the product in this 2017-2018 time 06:03

23 range. 06:03

24 And from talking to Quentin, my understanding 06:03

25 is there's -- they're not actually looking at that 06:03

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1 particular graph anymore in the normal course of 06:03
2 operations for the team. 06:03

3 Q. But if they pulled up the graph, there would 06:03
4 be responsive data that would fill in the graph; 06:03
5 correct? 06:03

6 MR. ANSORGE: Objection. Vague, and calls for 06:03
7 a legal conclusion. 06:03

8 THE WITNESS: I don't know what you mean by 06:03
9 responsive data that would fill in the graph. 06:03

10 BY MR. MCGEE: 06:03

11 Q. Sure. 06:03

12 So you're saying they aren't looking at the 06:03
13 graph anymore. They're not reviewing it. 06:03

14 What I'm asking is: Is if they did pull up 06:04
15 the graph, the graph would still have lines or bars or 06:04
16 whatever visual representation or graphical 06:04
17 representation the graph was designed to display. 06:04

18 Is that fair? 06:04

19 MR. ANSORGE: Objection. Compound. Form. 06:04

20 THE WITNESS: My understanding is that is 06:04
21 underscore Chrome underscore non underscore incognito 06:04
22 underscore mode is a field that is being filled in in 06:04
23 UMA -- not UMA -- not in UMA logs. It is not in UMA 06:04
24 logs, to be clear. It is only in [REDACTED] logs. And it 06:04
25 is a field that is still being filled in in [REDACTED] logs 06:04

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1 today, despite the fact that the reason the field was 06:04
2 introduced has passed. 06:04
3 BY MR. MCGEE: 06:05
4 Q. Okay. And from your fact sheet, the 06:05
5 is underscore Chrome underscore non underscore 06:05
6 incognito -- so without the underscore mode -- 06:05
7 THE COURT REPORTER: I'm so sorry, Counsel. 06:05
8 Can you start that question over? There was a little 06:05
9 bit of feedback. I didn't get it. 06:05
10 MR. MCGEE: Sure. 06:05
11 BY MR. MCGEE:
12 Q. So the -- you've got two bullet points in your 06:05
13 fact sheet. 06:05
14 One is the is underscore Chrome underscore 06:05
15 non underscore incognito, no GAIA. 06:05
16 What does that mean? 06:05
17 A. What that means is that the -- these [REDACTED] 06:05
18 logs that have this field set are not GAIA keyed. They 06:05
19 have location information. And then this is a Boolean 06:05
20 field, so it would be true or false. And there's the 06:06
21 location information, plus the Boolean field in the 06:06
22 [REDACTED] temp logs. 06:06
23 Q. Got it. 06:06
24 A. And not -- notably not GAIA IDs. 06:06
25 Q. Understood. 06:06

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1 combine this with UMA data. 06:08

2 MR. MCGEE: I think we've been going for about 06:08

3 40 minutes now. I just need to take a break so -- 06:08

4 MR. ANSORGE: Yeah. I'm fine with that. 06:08

5 Could we get a time count as well? How much 06:08

6 time is left on the record? 06:08

7 THE VIDEOGRAPHER: Yeah. So off the record? 06:08

8 MR. MCGEE: Yes. Off the record. 06:08

9 THE VIDEOGRAPHER: Okay. We're now going off 06:08

10 the record. The time is 6:08 p.m. 06:08

11 (Break taken in proceedings.) 06:17

12 THE VIDEOGRAPHER: We are now back on the 06:17

13 record. The time is 6:18 p.m. 06:17

14 BY MR. MCGEE: 06:18

15 Q. Dr. Sadowski, for the bits that we were -- or 06:18

16 excuse me -- the binary fields that we were just talking 06:18

17 about, the is underscore Chrome underscore non 06:18

18 underscore incognito underscore mode, is underscore 06:18

19 Chrome underscore non-underscore incognito, and 06:18

20 is underscore Chrome underscore incognito, do you know 06:18

21 what logic is being used to derive the values that are 06:18

22 stored in those binary fields? 06:18

23 MR. ANSORGE: Objection. Vague and compound. 06:18

24 THE WITNESS: I believe the is underscore 06:18

25 Chrome underscore non underscore incognito is referring 06:18

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1 to the same thing as is underscore Chrome underscore non 06:18
2 underscore incognito underscore mode. I do know about 06:18
3 how that field is filled in. 06:19

4 BY MR. MCGEE: 06:19

5 Q. Okay. And what's the logic for filling in 06:19
6 that field? 06:19

7 A. It looks specifically at whether there is an 06:19
8 X-Client -- X hyphen Client hyphen Data header in the 06:19
9 request that is sent. 06:19

10 Q. Is there any other thing that it looks for or 06:19
11 is that all that it looks for? 06:19

12 A. I believe that is all that it looks for. The 06:19
13 is underscore Chrome underscore non underscore incognito 06:19
14 underscore mode is if there is a X-Client-Data -- 06:19
15 X-Client-Data header sent, then that is the logic used 06:20
16 to set that to true. 06:20

17 This is a proxy for incognito, but it is not 06:20
18 a what I would call a reliable or accurate way to 06:20
19 determine incognito usage. 06:20

20 Q. Okay. And what's the -- what types of traffic 06:20
21 is this logic being applied to? Is it mobile traffic? 06:20
22 Is it -- you know, is it platform specific? 06:20

23 MR. ANSORGE: Objection. Vague and compound. 06:20

24 THE WITNESS: It is in [REDACTED] logs which are 06:21
25 [REDACTED]. I believe it will be 06:21

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1 cross-platform, but I do not know for certain. I would 06:21
2 have to investigate. 06:21
3 BY MR. MCGEE:
4 Q. Who would you speak with at Google to 06:21
5 investigate that? 06:21
6 A. I would speak again with Quentin Fiard if I 06:21
7 had a question about the -- this particular field in 06:21
8 [REDACTED] logs. 06:21
9 Q. Okay. And then I did this backwards but -- 06:21
10 apologies. 06:21
11 I can -- I've introduced two new exhibits. 06:21
12 They're going to be 16 and 15. 06:22
13 (Plaintiffs' Exhibits 15 and 16 06:22
14 were marked for identification.) 06:22
15 BY MR. MCGEE: 06:22
16 Q. But I'd actually like you to look at 16 first. 06:22
17 A. 16 first? Okay. I'm waiting for it to load. 06:22
18 Q. Thank you. 06:22
19 A. One other thing to answer your question. 06:22
20 To the best of my knowledge the is underscore 06:22
21 Chrome underscore incognito field is derived from the 06:22
22 is underscore Chrome underscore non underscore incognito 06:22
23 underscore mode. It is still depending on X-Client-Data 06:22
24 header logic and also looking at the user agent, but it 06:22
25 is not derived through some other mechanism than 06:22

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1 results; right? 06:48

2 A. Yes. If you search for Chrome underscore 06:48

3 non underscore incognito, that substring is part of a 06:48

4 name of a Boolean field in [REDACTED] logs that I have 06:48

5 already testified about. And that binary field is using 06:48

6 X-Client-Data header information to proxy incognito 06:48

7 states. It is not an accurate name for the binary 06:48

8 field, and it is not used in UMA logs. 06:49

9 Q. Okay. I think I am -- very close. Just want 06:49

10 to make sure. 06:49

11 Does the is underscore Chrome underscore 06:49

12 non underscore incognito underscore mode bit exist in 06:49

13 non-[REDACTED] logs? 06:49

14 A. To the best of my knowledge, that is the only 06:49

15 place it exists. If you -- this particular binary field 06:49

16 was developed with -- in -- as part of the design doc 06:50

17 that we reviewed earlier so that the [REDACTED] team could 06:50

18 look at how often they don't get a location header when 06:50

19 they're expecting to get a location header using the 06:50

20 presence -- or using the presence of the X-Client -- 06:50

21 presence or absence of the X-Client-Data header as a 06:50

22 proxy here for situations when you would or wouldn't 06:50

23 expect to get a location header. 06:50

24 Q. I understand that. 06:50

25 A. And that is the only way it is being used, to 06:50

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1 my knowledge. 06:50

2 Q. And what is the basis of your knowledge for -- 06:50

3 what's the basis of your knowledge for that conclusion? 06:50

4 A. A few different things. 06:51

5 Talking to Quentin Fiard who was involved in 06:51

6 actually implementing this field. 06:51

7 Looking in code search, including historical 06:51

8 code search, for where this field is set and used. 06:51

9 And also if you look in the protocol buffer 06:51

10 that has this field, there is an annotation saying that 06:51

11 it is specifically only used in [REDACTED] logs. 06:51

12 And that there's also a comment that links to 06:51

13 the design doc that we talked about earlier that is 06:51

14 related to this field. 06:51

15 Q. And that comment is on an internal document at 06:51

16 Google? 06:51

17 A. It is a source code comment. 06:51

18 Q. Okay. 06:52

19 A. Not a document comment. And it is a comment 06:52

20 directly above the definition of this field. 06:52

21 MR. MCGEE: Okay. I don't have any further 06:52

22 questions. 06:52

23 Thank you. 06:52

24 MR. ANSORGE: We'd like to take a break to see 06:52

25 if we have any questions. 06:52

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REPORTER'S CERTIFICATE

---o0o---

STATE OF CALIFORNIA)
) ss.

COUNTY OF YOLO)

I, KATY E. SCHMIDT, a Certified Shorthand
Reporter in and for the State of California, duly
commissioned and a disinterested person, certify:

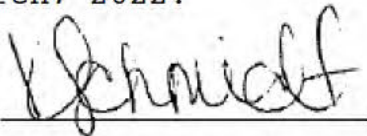
That the foregoing deposition was taken before me
at the time and place herein set forth;

That DR. CAITLIN SADOWSKI, the deponent herein,
was put on oath by me;

That the testimony of the witness and all
objections made at the time of the examination were
recorded stenographically by me to the best of my
ability and thereafter transcribed into typewriting;

That the foregoing deposition is a record of the
testimony of the examination.

IN WITNESS WHEREOF, I subscribe my name on this
11th day of March, 2022.



Katy E. Schmidt, RPR, RMR, CRR, CSR 13096
Certified Shorthand Reporter
in and for the
County of Sacramento,
State of California

Ref. No. 5130524 KES

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EXHIBIT 47

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1

2

UNITED STATES DISTRICT COURT

3

NORTHERN DISTRICT OF CALIFORNIA

4

CASE NO.: 4:20-03664-YGR-AVK

5

6 CHASOM BROWN, MARIA NGUYEN and

7 WILLIAM BYATT, individually and on

8 Behalf of all other similarly situated,

9 Plaintiffs,

10 v.

11 GOOGLE, LLC and ALPHABET, INC.,

12 Defendants.

13 _____/

14

15

16

HEARING

17

18

19 HEARING BEFORE: Special Master Douglas Brush

20 DATE TAKEN: Wednesday, March 23rd, 2022

21 TIME: Unknown

22 TAKEN: Remotely via Zoom

23

24

25 TRANSCRIBED BY: KIMBERLY H. NOLAN

CHASOM BROWN, ET AL. vs GOOGLE, LLC, ET AL.
Hearing on 03/23/2022

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24 Also Present:

25 Tracy Gao, Law Clerk at Quinn, Emanuel, Urquhart & Sullivan

1 when proceeding with the proto as a unit of analysis, or
2 maybe even the field as a unit of analysis, is it's still
3 tied to a very specific log source in this case.

4 So, there are specific [REDACTED] logs that we've
5 disclosed to you that have the field that's written, that
6 actually have that value. If that's a search you're
7 requesting, we can figure out whether those entail publisher
8 data.

9 But I want to clarify that because something is in
10 a proto, that does not mean it's in every log that uses that
11 proto. The proto is a list of all potential things that
12 could be filled in.

13 A lot of those are access-restricted, can only be
14 filled in by specific logs, and it's for that reason that in
15 our preservation proposal what we have tried to do is move
16 from the log level of analysis into the field level, where
17 if we agree these are the key fields that you're interested
18 in, we will work to figure out what is the longest period of
19 log where that exists.

20 That's separate from us changing the preserved --
21 preservation for entire log infrastructures, and I think
22 it's the most efficient way for us to proceed.

23 MR. MAO: But that field is already in [REDACTED] of
24 the logs in which -- in [REDACTED] of the [REDACTED] Bert Young logs --
25 right? -- and that's on the ad side, that's not on the

1 [REDACTED] side. In my understanding from Dr. Sadowski's
2 deposition, that field had been constructed and had existed
3 ever since [REDACTED].

4 MR. ANSORGE: And, so, because a field is seen in
5 a proto and the log uses that proto, that does not mean that
6 that particular field has a value.

7 The default will be false for values, and you're
8 going to find that -- you know, it -- UMA uses a [REDACTED] proto
9 for parts of its infrastructure. That doesn't mean that it
10 has that field written into it.

11 So, it's a -- if we need to search for information
12 related to that specific field, the special master thinks
13 that's, you know, proportional and appropriate for us to
14 proceed, I think we would -- could only do it in the
15 specific [REDACTED] logs, except if you're just looking for some
16 kind of description of the field infrastructure overall.

17 But the overall point I'm trying to make is that
18 the level of analysis -- and this is what I tried to argue
19 at our in-person hearing, too, and I'm sorry if I wasn't
20 effective in communicating it -- but I think the most
21 efficient and effective level of analysis for us is the
22 actual field and not the log infrastructure as we're
23 discussing the preservation plan, because we very quickly
24 find ourselves in a scenario where -- right? -- each log
25 will have standard preservation periods, each field will

CHASOM BROWN, ET AL. vs GOOGLE, LLC, ET AL.
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1 have different ones.

2 But what we really need to be focused on are these
3 are the fields Plaintiffs care about, that they know about,
4 that they're focused on, that are in their complaint, and
5 for those we can figure out preservation proposals, and
6 that's what we tried to do in the proposal that we sent you.

7 MR. MAO: And I'm not trying to lock you down
8 on the logic or the structure -- right? -- I'm literally
9 saying that for the logs you have identified as part of the
10 special master process, one, what logs actually include that
11 field, whether at a proto level or at the actual log level,
12 and then, two, which of those logs actually has that
13 specific field filled. I realize that there may be --

14 SPECIAL MASTER BRUSH: (Interposing) Well, there's
15 one nuance -- you're so close. I think there's one nuance.
16 The problem is which logs have the capability for that
17 proto, because, again, I think what Mr. Ansorge is saying is
18 like just because it can doesn't mean it does exist, and
19 that's where there's this kind of ephemeral thing. And, so,
20 that map -- and so -- and, honestly, I mean -- and maybe --
21 I don't know what that is, so I'm gonna kick it back to Mr.
22 Ansorge on what that is. No.

23 Is that even a doable thing to say, okay, with the
24 logs that have been identified as part of this process,
25 which ones could have -- could potentially have that field

1 MR. ANSORGE: Okay. Well, in that case I
2 (inaudible) --

3 MR. MAO: (Interposing) I'm not saying that
4 she said under oath that she needs to go back to talk to
5 engineers to figure that out.

6 MR. ANSORGE: Well, then I think -- I would like
7 you to send us that specific quote and passage where she
8 said that she's not -- is not providing an answer.

9 Not only did she identify the specific log sources,
10 we put them on a piece of paper for you so that there'd be
11 no typo, so there'd be absolute clarity on which exist.

12 She explained when they were written and she
13 explained, most importantly, the logic by which they were
14 written, and that logic is one that we have discussed ad
15 infinitum, both before the special master and in other
16 processes, at least since July.

17 There's been 30(b)(b) corporate testimony about the
18 false positives, false negatives associated with the absence
19 of the "X" Klein data header.

20 MR. MAO: Well, look, we're not arguing the
21 merits of the case right now, we're simply trying to isolate
22 the data, the relevant data. Right?

23 My point is this popped up in the schema for [REDACTED] of
24 the [REDACTED] logs, and I'm simply asking you whether or not
25 you need to update the rest of the logs to either reflect

1 that's similarly in there -- okay? -- or that it could be in
2 there, or something else. Like you've given no explanation
3 or logic to that.

4 And by the way, Dr. Sadowski's deposition,
5 actually, the incongruence is that she didn't point to
6 either of those [REDACTED] logs which ended up showing that field.

7 So how do I reconcile you saying that this field --
8 that the logs -- the [REDACTED] logs she identified is exhaustive
9 when she didn't even list the [REDACTED] additional logs that was
10 produced as part of the special master process which did use
11 that field?

12 MR. ANSORGE: Yeah.

13 MR. MAO: How do I reconcile that?

14 MR. ANSORGE: I think you reconcile that by
15 understanding what we've been trying to explain about protos
16 since October.

17 MS. GAO: Mr. Mao, let me try to explain this.
18 So, [REDACTED] of the [REDACTED] logs, as you see, have this field, but
19 they will always be written as false because that's the
20 default written -- default writing of these logs, because
21 they don't really have the capability to write in the logs.

22 So, even if you select the sources and we run the
23 searches, all of the results you will see will be false.

24 MR. MAO: So, I think you're wrong there, Ms.
25 Gao, because I think you used the word "capability," and

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Hearing on 03/23/2022

1 that's not true. I mean, it clearly has the capability to
2 do that. And the two questions are, one --

3 SPECIAL MASTER BRUSH: Well, let me pause you right
4 there, Mr. Mao, because I think there's a slight -- it's not
5 a universal capability to try to report it on, it's not --
6 even the option's not (blip) in every data source. You
7 know, there's a nuance there.

8 MR. MAO: Right. And, Mr. Brush --

9 SPECIAL MASTER BRUSH: So, what -- I guess let's
10 close this out, because we're at time. So --
11 (Speaking simultaneously)

12 MR. MAO: I'm just trying to figure that out,
13 Mr. Brush.

14 SPECIAL MASTER BRUSH: No, no, no. I understand
15 that.

16 MR. MAO: Exactly what (inaudible).

17 SPECIAL MASTER BRUSH: Yeah. It sounds like there
18 was a lot of information that was provided around this
19 topic, and if there's gaps, by all means.

20 I mean, I'm not saying we don't, but you're not
21 being -- we're not being very productive here getting to the
22 bottom of that.

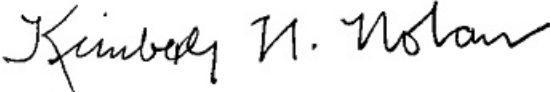
23 But, you know, are you asking -- and can we do this
24 as kind of an approach -- out of the additional -- out of
25 all the identified logs in the process, is it -- what would

CHASOM BROWN, ET AL. vs GOOGLE, LLC, ET AL.
Hearing on 03/23/2022

1 CERTIFICATION PAGE

2

3 I, Kimberly H. Nolan, Transcriptionist,
4 do hereby certify that this transcript
5 is a true and accurate record of the
6 electronically recorded proceedings,
7 transcribed by me this 1st day of
8 April, 2022.

9 
10 _____

11

12 KIMBERLY H. NOLAN

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EXHIBIT 49

**Redacted Version of
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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

- - -
CHASOM BROWN, WILLIAM : Case No.
BYATT, JEREMY DAVIS, :
CHRISTOPHER CASTILLO : 5:20-cv-03664-
and MONIQUE TRUJILLO, : LHK
individually and :
on behalf of all other :
similarly situated, : CONFIDENTIAL
:
Plaintiffs, :
:
v. :
GOOGLE, LLC, :
:
Defendant. :

- - -
Wednesday, June 16, 2021
- - -

Videotaped 30(b)(6) deposition of
GLENN BERNTSON held pursuant to notice,
beginning at 10:27 AM, on the above date,
and recorded stenographically by
Constance S. Kent, a Certified Court
Reporter, Registered Professional
Reporter and Notary Public.

* * *

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4	By Mr. Mao	9
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6							
7	E	X	H	I	B	I	S

NO.	DESCRIPTION	PAGE
Exhibit 1	Plaintiff's Notice of 30(b)(6) Deposition	10
Exhibit 2	Confidential-Google Display Server for [REDACTED] by [REDACTED] Bates GOOG-BRWN-000029458	15
Exhibit 3	Highly Confidential-Documents Entitled Fantastic Identifiers and Where to Find Them, Bates GOOG-BRWN- 00078278 through 78385	107
Exhibit 4	Confidential-Documents entitled [REDACTED] Bates GOOG-BRWN- 00027305 through 27313	124
Exhibit 5	Confidential-Documents, http://go/[REDACTED] [REDACTED] GOOG-BRWN-00026161 through 26168	193

1 rights for what?

2 MR. MAO: I'm reserving my
3 rights to ask additional questions
4 of a witness that's properly
5 prepared to testify to the topics,
6 including the topics which the
7 court had actually ordered.

8 MR. BROOME: Okay. But you
9 don't have any more questions for
10 Mr. Berntson?

11 MR. MAO: Disagree. I don't
12 know.

13 MR. BROOME: You don't know
14 if you have any more questions for
15 him?

16 MR. MAO: Steve, stop
17 burning my time.

18 MR. BROOME: Do you have any
19 more questions for Mr. Berntson?

20 MR. MAO: I'm pausing my
21 portion.

22 MR. BROOME: Okay. I'm
23 going to take that as a no.
24 Did -- can I -- can I ask my

1 questions now? I'm going to take
2 your silence, your non-response as
3 a yes.

4 - - -

5 E X A M I N A T I O N

6 - - -

7 BY MR. BROOME:

8 Q. Mr. Berntson, do you recall
9 that Mr. Mao asked you some questions
10 today about Google mapping Biscotti IDs
11 and [REDACTED] and conversion
12 tracking?

13 A. Yes.

14 Q. And I believe you testified
15 that mapping in [REDACTED] requires a
16 Gaia ID; is that -- is that right?

17 A. That is correct.

18 Q. For the dataflow that's at
19 issue in this case where users are on
20 their browsers, they're signed out of
21 their Google accounts, they're in private
22 browsing mode, would there be any mapping
23 from Gaia to Biscotti?

24 A. No, because when you go into

1 private browsing mode, you start off with
2 a completely empty cookie jar. A
3 Biscotti is created, and if you don't
4 sign in to Google, there's no Gaia to map
5 that new Biscotti to. The Biscotti that
6 is present on the non-incognito browser
7 instance is not shared with the incognito
8 browser instance so there's no way of
9 creating that mapping from an incognito
10 session.

11 Q. Okay. And -- and conversely
12 would there be any mapping from Biscotti
13 to Gaia under those same conditions?

14 A. No. Again for similar
15 reasons, there is no Gaia to map that
16 Biscotti to.

17 Q. Mr. Mao asked -- also asked
18 you a number of questions about the
19 X-Client-Data header.

20 Do you recall that?

21 A. Yes.

22 Q. Do you understand that the
23 plaintiffs in this case have proposed
24 that Google could use the absence of the

1 X-Client-Data header to identify users
2 who are in incognito mode?

3 A. Yes.

4 Q. And does Google use the
5 absence of the X-Client-Data header to
6 identify users who are in incognito mode?

7 A. No.

8 Q. And would that be a good way
9 to identify incognito users?

10 A. No.

11 Q. And why is that?

12 A. Because there are cases that
13 will lead to false positives; that is,
14 where you see an empty X-Client-Data
15 header and you assume it's incognito but
16 not and false negatives where the reverse
17 is also true. There are processes that
18 can result in empty client -- empty
19 X-Client-Data headers and to take an
20 empty client -- X-Client-Data header and
21 populate values.

22 Q. Can you give us a couple of
23 examples?

24 A. Sure. For the first case

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CERTIFICATE

I HEREBY CERTIFY that the witness was duly sworn by me and that the within deposition is a true and accurate transcript of the stenographic notes of the testimony given by the witness.

It was requested before completion of the deposition that the witness, GLENN BERNTSON, have the opportunity to read and sign the deposition transcript.

Corresponding Reporter
Certified LiveNote Reporter
Registered Professional Reporter
Certified LiveNote Reporter
and Notary Public
Dated: June 20, 2021



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EXHIBIT 50

Redacted in its Entirety